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S. Hrg. 100-261, Pt. 2

SUPERFUND IMPLEMENTATION

HEARING

BEFORE THE

SUBCOMMITTEE ON SUPERFUND AND ENVIRONMENTAL OVERSIGHT

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

DECEMBER 10, 1987

PART 2

Printed for the use of the Committee on Environment and Public Works

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SUPERFUND IMPLEMENTATION

THURSDAY, DECEMBER 10, 1987

U.S. Senate,
Committee on Environment and Public Works,
Subcommittee on Superfund and
Environmental Oversight,
Washington, DC.

The subcommittee met, pursuant to recess, at 9:40 a.m., in room 406, Dirksen Senate Office Building, Hon. Frank R. Lautenberg (chairman of the subcommittee) presiding.

Present: Senators Lautenberg, Stafford, Pressler, and Warner.

OPENING STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM THE STATE OF NEW JERSEY

Senator Lautenberg. We will call the meeting of the Subcommittee on Superfund and Environmental Oversight to order.

Thank you very much for being here, all of you.

Today marks our final Superfund hearing of the year. Over the past months we have watched the reauthorized Superfund law move slowly forward. We've watched with a critical eye. We have focused on how effectively EPA was managing the program. We have already identified many problems during SARA's first year.

We've seen some progress on the management side of things: in cost recovery, contracting competition, and oversight of State activities.

Despite some progress, I am concerned. Increased funding is important, but not by itself. It's got to translate into increased productivity.

Superfund is not yet realizing its potential for greater productivity and efficiency in two major respects. One is the clean-up process itself. The other is the enforcement process—the legal mechanisms of the program.

Last year EPA actually obligated about $1 billion for Superfund. That's four times the annual average of the previous six years.

But the results of the funding increases are mixed and hard to guage. Unfortunately, annual average outputs from prior years are not hard to beat, given the abuses and slowdowns of the past.

With that in mind, we essentially see small to moderate increases in starts of cleanup studies—RI/FS's—and actual site cleanup work.

Perhaps the most encouraging statistic was the large increase in remedial designs, the last phase before actual cleanup begins. This could signal future increases in actual cleanup work.

But it's not clear that EPA is doing all it can to improve the efficiency of the program. The agency projects that it will complete work at 30 sites a year. That pace suggests that it will take 30 years to complete just the sites on the NPL list that exists now.

RI/FS's are still taking almost 2½ years, and no cleanup work begins at sites until, of course, the RI/FS's are done.

The estimated total cleanup time at sites looks like it's running at 6 to 10 years of elapsed time. Long time periods and complex cleanups are invitations for inefficiency.

Like the cleanup process, agency enforcement requires scrutiny. Last year we did not see significant increases in cost recovery suits, administrative orders to compel cleanup, or suits for noncompliance.

Making matters worse are problems with the quality of the past year's cleanups. Blake Early of the Sierra Club identified this in his June testimony before this subcommittee, and Dr. Cole, a witness here today, also co-authored a report suggesting subpar cleanups.

Today's assessment is in some respects quantitative, but this subcommittee's previous hearing on cleanup standards implementation speaks for itself. I, too, have serious questions about EPA's adherence to Superfund's cleanup standards.

Quantity means little without quality. I will continue to criticize the agency where it waivers from the law's cleanup standards. But at the same time we've got to encourage EPA to boost its productivity.

So today we push forward on the management questions. We'll identify inefficiencies in the program, and we'll look for solutions.

Based on our previous hearings, our months of examining the program—and with some very helpful guidance from our witnesses here today—I'd like to start the ball rolling myself.

I'm going to summarize a 16-point proposal to improve the efficiency of the Superfund program.

First, EPA should push all of the regions to streamline RI/FS's through enhanced site investigations and model feasibility studies. This means getting more investigative data before the RI/FS begins and developing models for reapplying experiences from prior sites.

Second, EPA should explore whether it can initiate actual cleanup work sooner by integrating clean-up activity into the RI/FS.

Third, EPA should move aggressively to improve and maintain the quality of its Superfund workforce through training institutes and multiyear employment commitments.

Fourth, training institutes should emphasize contracts management, legal training, and site management.

Fifth, EPA should improve site work oversight by assuring that site managers receive backup from other regional staff and by keeping site caseloads manageable.

Sixth, EPA, ought to use rigorous deadlines coupled with incentives and penalties to encourage Superfund contractors to complete work on time.

Seventh, EPA should back up its deadlines by budgeting for particular projects only those resources reasonably necessary to meet such timetables. Surplus in the budget for a project doesn't give contractors the incentive to meet deadlines.

Eighth, EPA should stop bundling 70 percent of its final cleanup plans in the last months of the Fiscal Year. As Dr. Hirschhorn of OTA will suggest, such last minute action prevents an even flow of cleanup work.

Ninth, EPA should head off community resistance and distrust of cleanup plans by involving the citizens at the earliest possible time. This requires getting the technical assistance grants program up and running.

Tenth, EPA quotas for completion of cleanup work should not mean shying away from threatening or complex sites.

Eleventh, EPA should replenish the Fund and push the program forward by aggressively using all of its enforcement tools and establishing enforcement consistency throughout the regions. Vigorous enforcement will also provide incentives for settlements.

Twelve, EPA should also set aside funds for cleanup in the event that settlement negotiations fail.

Thirteenth, to move cases along more efficiently, EPA should push for more specialization and more thorough case development by regional legal staff.

Fourteenth, EPA should also explore whether creating legal expediter positions in the regions and/or headquarters can streamline the process. As Mr. Moorman, one of our witnesses, and others have suggested, a staffer devoted to expediting the enforcement process could help to break logjams.

Fifteenth, in moving forward with a more competitive contracting process, EPA should work to improve the efficiencies of its own procedures as well as those of States using Superfund money.

Sixteenth, EPA regions should develop and implement strategies to move work forward more aggressively and to assure that failures to spend allocated funds are not due to inefficiencies.

I look forward to exploring these ideas and others with our witnesses today, and I thank you all for your participation.

Now, as I think all of you know, the practice for witnesses before oversight committees provides for sworn testimony. So I would ask you to stand and raise your right hands, please.

Do you solemnly swear that the testimony that you will give before this subcommittee is the truth, the whole truth, and nothing but the truth, so help you God?

[The witnesses respond "I do."]

Please take your seats.

In order to try to move the committee hearing along, we're going to be forced to restrict the verbal testimony to 5 minutes. Your full testimony will be accepted for the record. So I would, therefore, ask that you summarize. We'll try to be patient if you're close to the end, but we'd like to maintain the 5-minute schedule.

I want to welcome Dr. Cole and Dr. Hirschhorn. Dr. Cole is the science director for Clean Water Action, and he's been closely examining Superfund over the past year. Dr. Hirschhorn from OTA also specializes in Superfund issues, and we welcome you both. I'm sorry, Dr. Cole, I know that you have to leave a little early. We'll ask you to start now.

STATEMENT OF HENRY S. COLE, SCIENCE DIRECTOR, CLEAN WATER ACTION PROJECT, AND RESEARCH DIRECTOR, NATIONAL CAMPAIGN AGAINST TOXIC HAZARDS ACCOMPANIED BY BILL WALSH, ATTORNEY FOR THE U.S. PUBLIC INTEREST RESEARCH GROUP

Mr. COLE. Thank you, Senator Lautenberg.

I have with me today Bill Walsh who is an attorney with the U.S. Public Interest Research Group. If I have to leave, he will be here to answer questions. He was one of the co-authors of the report which you mentioned on assessing EPA's Superfund cleanup after one year.

I'm going to attempt to condense these remarks due to the time constraints.

I think it's very critical that we have this hearing and other hearings on the question of the efficiency of the Superfund program. A lot of money has been spent and, as you've said, so far the rate of progress has been painfully slow. I know about this because I provide technical assistance to a number of citizen groups, grassroots groups, who are dealing with Superfund sites and they have been frustrated for a very long time and continue to be so.

Cleaning up a Superfund site is a very difficult technical problem and a very complicated one because there are so many factors, so many differences between sites, and so many players. The causes of delay and inefficiency are numerous and seem to vary from site to site, from region to region. Nevertheless, I believe that the program has been hindered over the past 7 years and continues to be hindered by a serious lack of leadership on the part of the Administration. This lack of leadership manifests itself in many ways.

First, Guidance is fuzzy and in some respects at odds with the law and with public expectations.

Second, the project officers and other front-line troops are hard working and dedicated. However, they are ill equipped to deal with the enormous responsibility of cleaning up sites. Many are poorly qualified or receive little training.

Third, a grave concern is that the turnover rate at some of these sites, particularly the difficult ones where there's public controversy, is extremely high. This leads to inefficiency because the new people must be brought up to speed.

Fourth, often the supervision of consulting firms is weak and the firms, rather than the agency, are making critical judgments.

Fifth, technology research development and transfer technology has received far too little attention and funding. It's amazing to me when I find citizens telling project officers what is being done at other Superfund sites, so that they might use that technology at their site.

Sixth, finally, the agency approach to reluctant, responsible parties is often to appease rather than to enforce. Decisionmakers waiver and bend between the alternating pressures of public outcry and those exerted behind closed doors by powerful, responsible parties. This adds enormously to response time.

The main thing that I want to talk about, though, is real efficiency versus false efficiency. It is absolutely essential that we distinguish between what is efficient and what is simply quick, between what is progress and what simply looks good on paper. There is a real danger that pressures growing out of legitimate concerns over the slow movement of the program could motivate EPA and the States to make decisions which appear to save time or money, but which in the long term result in serious and costly setbacks for specific cleanups and for the program as a whole.

One example, as you mentioned, is the annual late summer rush to issue records of decision by the close of the fiscal year—bean counting time. This rush can lead to careless judgment and to shortchanging of public participation.

A variant of bean counting is bean "discounting". In this practice the administration has attempted to arbitrarily exclude whole categories of waste sites—for example, certain municipal landfills—from the Superfund clean-up program.

I can't possibly go into all of these right now, but let me summarize two of the most important.

First, the most efficient cleanups are permanent cleanups rather than stop-gap cleanups. The Agency has already been stung on several occasions by the failure of allegedly permanent containment remedies, wasting precious time and millions of dollars.

I think, Senator, you're very familiar with the LiPari landfill. In 1983 they built a containment system that was touted as the Cadillac of containment systems, and 2 years later they found massive leaks at the site and they're still involved in a very expensive cleanup and will be for years to come.

That happened before the new Superfund, but I've given some examples of records or decision under the new Superfund where similarly impermanent, stop-gap solutions are being made, even in environmentally sensitive regions such as flood prone zones and where water supplies are vulnerable. I am sure that history will repeat itself and the Agency will find itself coming back to those sites with yet more costly remedies.

The second area that's written up in the testimony is that efficient cleanups cannot be achieved without early investment in data collection that will provide an accurate, three-dimensional portrait of each site. Without such an investment, without thorough knowledge of the ground water and other key environmental factors of the site, cleanup decisions are at best a gamble.

We must not skimp on information gathering as a shortcut to the remedial design stage.

Senator LAUTENBERG. Dr. Cole, I'm sorry that we can't hear your full testimony. I read it and it is excellent. It will be fully in the record.

Mr. COLE. Just let me point out that there are some specific case examples in the testimony of all of these points. I'll be glad to answer questions.

Senator LAUTENBERG. Thank you very much, Dr. Cole.

Dr. Hirschhorn, it's good to see you again. I remember the first time that you testified before this committee. It was in New Jersey, wasn't it?

Mr. HIRSCHHORN. Yes.

Senator LAUTENBERG. It's good to have you with us, and I would ask you to begin to summarize your testimony.

STATEMENT OF JOEL S. HIRSCHHORN, SENIOR ASSOCIATE, OFFICE OF TECHNOLOGY ASSESSMENT

Mr. HIRSCHHORN. Thank you, Senator. I appreciate the opportunity to participate today. What we're going to do is give the first, preliminary results of our assessment of Superfund implementation, which in fact you requested earlier this year.

What we've tried to do at this stage is look at a lot of the data that comes from EPA's own files and reports to get some clues and answers on how to improve the efficiency of the program. I think everyone shares the same goal of trying to get more environmental protection faster and at less cost.

But I do want to emphasize that the data that we now have and the analysis of that data suggests that achieving Superfund's environmental mission has become a secondary activity at EPA. I'm going to talk about three particular concerns.

First, we see that bureaucratic goals seem to overshadow environmental priorities and technical information and issues. One of the first observations we've made with this new data is that in the past 2 years, for example, two-thirds of EPA's decisions on how to clean up sites, the records of decision, were, in fact, issued in the month of September—two-thirds in September.

We think there are a lot of implications of what we call this "bunching of rods." First, it reduces time for proper reviews of the documents which precede the cleanup decision, particularly the feasibility study. That means that the public and State agencies don't have enough time to review documents. I also want to emphasize that there's probably not enough time for EPA itself to examine the comments that it receives from communities or States or even regions and consider alternatives. What I'm saying is that on paper the process looks good: you put out a report, get comments, react to it, make a decision. In fact, this bunching of decisions in September makes it appear that this process has collapsed on itself and that people just don't have enough time to really participate, and there's not enough time to react to the comments. We can see no sound environmental or engineering explanation for this bunching of decisions in September at the end of the fiscal year.

Another point I would want to make briefly is that a lot of people don't understand that most sites that enter the Superfund Program in the inventory get eliminated. Overall, about 90 percent of the sites will not make it to the national priorities list. Most importantly, about 30 percent of the sites in the past have been eliminated at the first screening stage, called the preliminary assessment.

One of the things that people ought to begin to think about are what people in the medical and health care think about—false negative results; that is, reaching a decision that a site doesn't need a cleanup when in fact it really does. We think that many hundreds of sites that have been eliminated from the Superfund Program may, in fact, need cleanup and not be on the National Priorities List.

One of the things we suggest to improve this situation on bunching of rods is that EPA management could emphasize total output of their workers in regions over the entire year and reward those kinds of efforts rather than reward end-of-fiscal-year results.

The second major theme of the testimony today is that there is unequal environmental protection in the United States depending on where people live, what EPA region they are in. One often hears the statement that there are 10 different EPA's in the United States, and indeed that appears to be justified.

Some examples are that on this elimination of sites at the first step, some of the data is really rather remarkable. For example, as a result of preliminary assessments, Region VI and region VII have eliminated 80 and 76 percent of their sites. Compare that to Region II and Region III where they have only eliminated 1 and 5 percent of the sites at the first rough screening step—and I want to emphasize when there is very little data available to eliminate sites.

Also, with regard to this bunching of rods in September, one sees a remarkable difference again among the regions. For example, Region V issued 83 percent of their decisions in September last fiscal year. Region VI issued only 27 percent in September. We have other examples of regional differences.

The third theme is that we don't see signs of improvement with regard to efficiency. Delays are widespread, and the program reforms which have been initiated seem unlikely to remedy the situation. We calculate it will be the year 2000, for example, just before they finish the studies on all the sites that are expected to enter the NPL system.

Although EPA speaks of an average of 25 months to do a RF/FS, I would point out that we've looked at the actual data and the fiscal year 1987 data shows a 34-month average, and in some regions and in some places it's much longer than that. One way to improve efficiency of RF/FS's, we think, is to better integrate the site inspection and the remedial investigation.

It's interesting to note that we have different parts of the EPA program that don't talk to each other a whole lot probably, and they are now expanding the site inspection part of the preremedial phase. They are also expanding the remedial investigation. Rather than expand them independently, one could integrate them and probably get some real efficiencies.

The other example I wanted to give, LiPari, has been mentioned. One of the other interesting things we've looked at is: Are there excessive studies going on? I think it's interesting to note that at LiPari landfill 80 percent of the $5 million that has been spent on that site has been for studies, and at Love Canal 50 percent of the $20 million has been for studies. I think we ought to really look at whether all these studies are necessary, how long they take, and, as you said, whether we could get more physical cleanup involved earlier in the process.

The last point is that to improve the system we suggest that EPA could use management consultants or other experts who are not now implementing the program. We've noticed—and in the full testimony we have two examples of—major Superfund contractors who not only do the work in implementing the program, but then are also used by EPA to supply the analysis and advice on how to reform the program. We suggest that using some outside people who are not now working the program might give some new insights on improving efficiency.

Thank you.

Senator Lautenberg. Thanks very much to each of you. Again, I'm sorry that we are so time limited because the testimony that each of you offers is excellent.

I get the feeling as I hear your testimony that EPA is not doing its job; that the overwhelming recitation of criticism suggests that we'll be out of money and time before we're out of Superfund sites.

I thank each of you and at this point will let you go and ask that, if we have questions, that we'll submit them in writing. If you would get the responses back to me as quickly as possible——

Dr. Cole. Senator, I just want to say one thing quickly, which is while some studies take too long and are perhaps done inefficiently, however obtaining information in complex situations is usually a very good, cost-effective expenditure of funds because it is more likely to result in a cleanup which matches the nature of the problem. Without difficult information the cleanup may neglect, a critical situation or large volumes of waste in the end this will turn out to cost more and take more time.

Senator Lautenberg. Yes. I was struck when I listened to Dr. Hirshhorn as we talked about the elongated process for study and the sums spent on study. Information gathering is a critical factor, especially at this still relatively early part of the Superfund structure. Even though we've had half a dozen years of Superfund being on the books, the fact is that the first several years were spent in primary school, if I may use the analogy. But the data collection process is one that's a very important one.

The question is, How could we do it more efficiently? My guess is—and now I talk as a layman, not as an expert on data collection, which was the field that I came from, but rather in terms of the science necessary to establish the data — I don't know how much more efficient it can become, but I would guess that we could do it sooner and include some part of the cleanup process.

Mr. Hirschhorn. I think that's the important point. Nobody's against getting information, but we're talking about many years passing before the true cleanup begins. I want to point out all these major sites that we talked about like LiPari and Love Canal, millions of dollars have been spent and none of them has been completely cleaned up yet.

Senator Lautenberg. Yes.

Mr. Hirschhorn. Also, delays happen at the beginning of the system. Sites can wait for years just for the preliminary assessment.

Senator Lautenberg. Yes; the question is whether or not these things can be done in parallel as opposed to sequentially.

Mr. Hirschhorn. Exactly.

Mr. Cole. Well, and getting the information early in the game—if you skimp and skimp and skimp and then suddenly 3 years later you find you have to know a lot more about the ground water, then you have to come in and start a whole new phase of the investigation. That can add tremendously to time. That has happened at a number of sites.

Senator Lautenberg. Thank you both.

I now invite the next panel: Mr. Moorman and Ms. Warren.

As you saw with the earlier panel, since this is an oversight process, we'd ask you to stand and take the oath, please. Raise your right hand and I'll ask you: do you solemnly swear the testimony you'll give before this subcommittee is the truth, the whole truth, and nothing but the truth, so help you God?

[The witnesses respond "I do."]

Please take your seat.

I'd like now to welcome Mr. James Moorman and Ms. Jackie Warren to the witness table. Mr. Moorman is a former Assistant Attorney General and currently a private practitioner, and he brings an important perspective to the Superfund enforcement issue. Ms. Warren is an attorney at the NRDC. She specializes in Superfund and has testified before our subcommittee before. We're always interested in her views.

I welcome you both. You heard the admonition. We have a standard 5 minutes for all presentations and would remind you that your written testimony in full will be accepted into the record.

Mr. Moorman, we invite you to present your testimony first.

STATEMENT OF JAMES W. MOORMAN, ATTORNEY, CADWALADER, WICKERSHAM & TAFT, WASHINGTON, DC

Mr. Moorman. Thank you, Mr. Chairman.

Mr. Chairman, I think you put your finger on the problem with Superfund when you gave your opening remarks here today and pointed out that the number of remediations is inadequate and that remediations are just not moving fast enough. You used the term 30 years. I've made the same calculation. Mr. Porter, who is going to testify here later, recently stated EPA's goal of cleaning up 25 or 30 sites a year. There are approximately 950 sites that are on the National Priority List, 805 on it, 150 proposed. At the rate of 25 or 30 sites a year, that comes out to 30 years to clean up the list.

Now everybody believes that there are going to be more sites placed on the National Priority List, so that really means that no one here will see the National Priority List cleared in our lifetime. It is becoming a societal task like cathedral building was in the Middle Ages. We're going to spend a century or so cleaning up Superfund sites. I don't believe—and I doubt if the Senator believes—that that's a satisfactory state of affairs.

Now what is to be done about this? Well, we can accept the status quo, of course, but I think we don't want to do that. Second, we can throw more money at EPA under the Superfund and hope that that will speed things up. The third thing we can do is to direct EPA to mobilize the private sector to increase the number and pace of cleanups.

Currently the private sector is doing about a third of the cleanups, which are being done, and that appears to be EPA's goal. I think that the private sector can do more. The principal reason is they have the reservoir of project management skills in this country. Each site is an individual project requiring such skills. Unfortunately, under EPA's current settlement policies and practices, I don't believe the private sector can be mobilized for a significant increase in the number of cleanups. This has to be changed.

To change it, EPA has to develop a focused program to mobilize the private sector. It has to lower barriers to private party cleanups. It has to improve the incentives necessary to undue private party cleanup and it has to create a climate that will foster more private party cleanups.

I have spelled out a number of specifics such a focused program should deal with in written submission to the subcommittee. I'll just go down the list quickly.

To begin with, there is a bias in EPA settlement policy which encourages the private sector to simply reimburse EPA for the cleanup after EPA does the cleanup work. It is currently much more inviting for industry to reimburse EPA than to step forward and do the cleanup. That bias has to be changed so that it becomes more inviting for private industry to do the cleanup than to simply wait and reimburse EPA.

Second, the negotiations for private party cleanup are dragging out too long. Now when it becomes necessary to undertake a cleanup, but negotiations aren't completed, EPA's normal response is to do the cleanup itself. That means private party cleanup becomes the victim of negotiation delays. I think the principal reason for this problem is EPA's ponderous consensus decisionmaking process in the course of negotiations. That process has to be done away with and some method has to be found to expedite EPA's internal decisionmaking process.

Third, I believe EPA is attempting to impose settlement documents which are too onerous for private parties to undertake cleanup. I think this is causing a number of companies which are otherwise perfectly willing to do cleanups to simply drop out of the process. Those companies really do not want to accept a number of the particular clauses in the settlement agreement. I've spelled this out at length in my testimony.

Fourth, I think EPA settlement guidances have become a barrier to cleanup. I believe that EPA is devoting too much energy to the preparation of and the adherence to guidance, management time which could be better spent on getting deals done to clean up sites.

Fifth, I agree with the comments here that the remedial investigations and feasibility studies are taking too long. The RI/FS have become a bottleneck to cleanup, because you cannot undertake a cleanup until you've completed the RI/FS. This bottleneck has to be broken.

Sixth, we have a problem with some companies that aren't cooperative, often called "recalcitrants." If private parties wish to clean up a site, they have to pay for the share of recalcitrants and then sue them for contribution. This turns out to be a difficult task. To deal with this problem, I offer two suggestions. One, EPA needs itself to pursue recalcitrants with more vigor. Two, EPA should use the mixed funding device which Congress has provided in SARA to a greater extent.

Seventh, the stipulated penalty clauses that EPA proposes are too onerous. I recommend that EPA minimize the stipulated penalties to foster settlement.

Eighth, the dispute resolution clause proposed by EPA would make dispute solution too onerous to be useful to the private party. EPA should adopt a turnkey approach in private party cleanup settlement in order to eliminate disputes.

Ninth, EPA has muffed the opportunity to provide cost incentives for private party cleanups, and, tenth, covenants not to sue are discouraging private party cleanups as opposed to reimbursement settlements.

I see that the red light is flashing so I'll simply conclude with my remarks by saying that it's not only companies that conduct cleanups, but also entities called steering committees. Steering committees need encouragement because the task of undertaking a cleanup for a steering committee is a very onerous task, and because the signals they are getting is that EPA is really not all that interested.

Thank you, Senator.

Senator LAUTENBERG. Thank you very much, Mr. Moorman. Your testimony is very interesting and the perspective you bring will certainly be considered as we try to evaluate not only what EPA has done or hasn't done, but the process that we ought to enhance with their help and cooperation.

I have two distinguished colleagues, one the former chairman of this committee known as the "Godfather of the EPW Committee," Senator Stafford. Senator, do you have anything that you want to say before we hear from Ms. Warren.

Senator STAFFORD. Mr. Chairman, I have no opening statement. If I am the Godfather, I thought I should come by and see what shape the patient was in this morning, so here I am.

Senator LAUTENBERG. Well, the patient is not yet on the respirator, but we're wheeling one in, Mr. Chairman. With all the work that you did on Superfund and trying to move the project along, you may as you review the testimony hear some very disappointing results.

Senator Warner, the ranking member of this subcommittee.

OPENING STATEMENT OF HON. JOHN W. WARNER, U.S. SENATOR FROM THE COMMONWEALTH OF VIRGINIA

Senator WARNER. Thank you, Mr. Chairman.

Again, I wish to compliment you on going forth with this hearing. It's a very important one and it seems to me one of the issues which—and I ask that my statement be included. I don't want to delay the process.

Senator LAUTENBERG. Without objection.

Senator WARNER. I am concerned about the risk-free approach. It seems to me that we should at least look at the consequences of a policy which is something less than risk free. This is dangerous ground to tread on. But, for example, if you go from zero cleanup to 100 percent cleanup and it takes *x* years to achieve that and *y* dollars, and then you look at—and you can only do so many sites within the funding provided by the Congress, should we be looking at something less than 100 percent in certain cases, say 80 percent, whereby we'd get many more sites done in much less time and the dollars could be spread over, say, a couple hundred sites versus a very few sites?

I'm speaking without a great deal of knowledge on many aspects of the cleanup in terms of the toxicity, and so forth. I suppose in water we should compromise at nothing less than 100 percent, but maybe there are some other types of pollutants where the environment can coexist with less than 100 percent cleanup, recognizing that those funds and that time can be transmitted over to another site which is equally perilist to the environment, and you could achieve an 80 percent cleanup there.

I hope during the course of this testimony that I and other members of the committee can be enlightened on those subjects.

[Senator Warner's statement follows:]

Opening Statement of Hon. John W. Warner, U.S. Senator From the Commonwealth of Virginia

Thank you, Mr. Chairman, for the timeliness of today's hearing.

I am especially pleased with the primary topic before us today—the seemingly inordinate amount of time needed to complete Superfund cleanup actions.

In my opinion, this is probably the most important issue facing the program. When the Congress reauthorized Superfund, we were, in no small sense, responding to significant concerns expressed by the public over the lack of progress in terms of actual sites cleaned up during the original Superfund Program.

For the most part, these concerns were well founded and we in the Congress expect the Agency to do a lot better this time around.

We simply cannot come to the end of the current program and have little or nothing to show for our efforts.

We also do not want EPA to shoulder the entire burden of cleaning up these sites. EPA will never have enough resources to operate in such a manner. Private parties responsible for the damage should be encouraged to undertake cleanup actions on their own, with EPA taking the lead only when these parties cannot or will not. EPA, for its part, should provide responsible oversight of private cleanups and institute procedures to encourage such actions by these parties.

The new law, as everyone recognizes, it exceedingly complex. Indeed some might say it is too complex. Nevertheless, it is the responsbility of the Environmental Protection Agency to implement the law to the best of their ability.

I am confident that EPA is up to the task. During this summer's recess, members of my staff were able to travel to some of EPA's Regional Offices to speak directly with the people tasked with making the new program work.

After talking with my staff, I am encouraged that the Agency has some specific ideas on ways to reduce the time necessary to complete remedial actions and more effectively manage the program in general.

I look forward to hearing more from EPA on their plans to implement these changes and from other witnesses on whether the changes will indeed work.

Senator LAUTENBERG. Thank you very much, Senator Warner.

I now ask Ms. Warren if she would offer her testimony under the same rules and conditions, watching the time.

TESTIMONY OF JACQUELINE M. WARREN, SENIOR STAFF ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL; ACCOMPANIED BY DOUGLAS WOLF, STAFF ATTORNEY, NRDC

Ms. WARREN. Thank you, Mr. Chairman.

I have with me today Douglas Wolf who is a staff attorney at NRDC who is working on the Superfund program with me.

Senator LAUTENBERG. Welcome.

Ms. WARREN. Unlike other people who have testified here, we have not been directly involved in cleanups. The role that we play is watching the agency's implementation and their efforts to get the program moving. Based on conversations that we've had with

EPA and with State agency people, our view is that there is a variety of reasons why the Superfund program seems to have been moving so slowly.

First of all, EPA had no money in the previous year when they ran out of funds before the law was reauthorized. So, some of the delay is attributable to startup problems and to implementing provisions of the new SARA.

But one of the things that we've seen very clearly is a very unimpressive enforcement record. EPA has said, their leadership from headquarters has said repeatedly that an effective Superfund program requires three kinds of actions: strong enforcement, settlements, and fund-financed cleanup. We don't see the first of those happening very effectively. In fact, what we do see is a feeling in the regions that section 106 actions to compel private party cleanups by recalcitrant private parties are not being undertaken for reasons of concern about resources or because there have been a couple of district court cases which have ruled that EPA has to defend the remedy in district court. Such pre-enforcement review is not allowed under Superfund—a challenge to the remedy at the point before it's carried out.

Be that as it may, the State of New York has $500 million worth of private party cleanup activities underway based on settlements that they attribute to a very vigorous enforcement presence. We believe that EPA really has to do the same thing. By putting so much of their emphasis on the other two parts of their Superfund strategy, we believe that EPA is really at a disadvantage in the settlement process. They're under a lot of pressure from private parties who I think probably don't believe that section 106 suits will be brought against them if they don't agree to settle, and they are putting pressure on EPA to relax the stipulated penalties or to use more mixed funding and things of that sort.

Coupled with this reluctance to bring enforcement suits is information that we recently learned, which I have attached to our testimony, about the formation of a very large coalition of chemical, petroleum, insurance, and electronic companies who are gearing up a 4-year campaign to prove to the American public and to the Congress that the Superfund is fatally flawed in its structure, that it cannot work, and that it needs to have major changes in 1991, the first and foremost of which is getting rid of the strict joint and several liability standard.

One of the most discouraging aspects of this campaign is that it is being led by William Ruckelshaus who has a very good reputation in the country as probably the leading environmentalist in the United States. It is very discouraging to us to see a person of his stature and credibility lending his name to an effort which appears to be designed to be a self-fulfilling prophecy to show that the Superfund isn't working and can't work. To a large extent, if that's the intention of it, there's going to be an effort to make that intention be realized. Therefore, what we hear from industry about the obstacles to settlement or the obstacles to cleanup have to be viewed with an eye toward whether it is for public consumption to prove the statute doesn't work or is really a legitimate criticism of the program. I'm extremely disturbed about it. One of the reasons that I wanted to mention it here today is that I think it's something that the public should be aware of, so that when we hear the kinds of statements that will be made, we will have some context in which to place it.

I think that we've heard a lot of good suggestions so far from the other witnesses about what EPA could do to streamline its internal processes to get the RI/FS program under better oversight and to have better trained people. I believe that, coupled with that, as I said before, there has to be a much more vigorous enforcement effort by the Agency to show that they are absolutely committed to getting the private sector to do its part in cleanups.

The level of the fund was based in large measure on representations that Administrator Thomas made to congressional committees in reauthorization about how much money EPA expected to get back from an aggressive enforcement program to help fund the cleanup process. We're not seeing that money yet, and part of the reason is probably because the bulk of the money comes from cost recoveries after remedial actions, and we haven't gotten to the remedial action stage on a lot of these cleanups.

I think that the jury is still out on this. I don't think that it's appropriate for anybody to be prejudging at this point when literally the ink is barely dry on the 1986 amendments whether they can or can't work and whether the system really is flawed. I think that we have to stand behind the judgment that the Congress made that this statute is sound and that it can work, and we must keep EPA's feet to the fire. It is a little bit awkward for me to be in the shoes of a defender of EPA on this, but I think that with respect to enforcement, the leadership in the agency is telling the regions get out there and bring those section 106 actions, use the administrative order authorities, and get the private parties to realize that their best avenue for a good result is to come to the table and make a good settlement. To the extent that responsible parties don't feel that external pressure, I think you're going to see settlements which either aren't as good as they would be and should be or long delays.

I think that there are several points that have to be addressed. One of them is the Agency's role in enforcement. The next one is getting that process streamlined. I think the 16 points that you read off earlier in the day have some very good suggestions, and the earlier witnesses provided some.

I also think that we need to send a strong message back to this group that's organized to prove that Superfund doesn't work, that it can work and will work and that we're going to make sure that EPA makes it work.

Thank you.

Senator LAUTENBERG. Thank you very much, Ms. Warren.

What we'll do is have a round of questions and we'll limit ourselves to a 5-minute cycle. Again, we don't want to hold you too long. I appreciate the testimony that each of you gave.

I'd like to ask each of you the same question: You've heard criticism of the regional performance that raised question about the overall management of the Superfund—why should one region be performing more efficiently than another?

Mr. Moorman, you're familiar with the programs and the performance. Do you think that there is a substantial difference between the regions in terms of their performance levels?

Mr. MOORMAN. I think there is, and I think there always has been, Senator Lautenberg. The EPA is a very complex organization with its different regions. Each region has different States to deal with, and I think there is a noticeable difference between the regions.

Senator LAUTENBERG. You served in government and now the private world. You come from a big law firm, with many partners. Is it unreasonable to expect that each of your partners, the equivalent of a manager, should give a client reasonably similar performance or is it fair to say that, look, we've got some good ones and we've got some bad ones; the bad ones, they don't give good law to their clients, but we have others who make up for it? Certainly you would think that this could be managed better, I would hope?

Mr. MOORMAN. I think that EPA has never really developed a culture of project management and that what you have is an agency which cut its teeth on issuing regulations and enforcing regulations across a broad spectrum of activities. So in the context of a project management situation, the different regions have each reacted differently. It hasn't been their experience and, frankly, some have done a better job of it than others, but none of them have really done it the way I think the Congress would like.

Senator LAUTENBERG. That's an interesting observation. The fact is that maybe in the nature of the development—Ms. Warren describes the ink barely dry—but I've got to tell you that Superfund's been around Washington longer than I've been around Washington. It seems to me that with a half a dozen years of preliminary start-up situation and then with SARA, that we ought to be able to have learned enough in that beginning period to make the process and the agency more efficient.

The observation Mr. Moorman makes is that perhaps this is more like a data base operation as contrasted with hands-on operations management. Ms. Warren, you study the agency fairly closely. What do you think of the regional differences?

Ms. WARREN. No, it's a very decentralized operation, and the regions have a lot of autonomy. I think in that kind of a situation the agency needs to give very clear directions from headquarters and I don't think the Agency's guidances provide that.

When I said the ink was barely dry, one of the problems in settlements in the past, that we've heard about from EPA people in the regions is that they didn't know what they could do with respect to mixed funding or how much flexibility they had in making settlements. Now the law has been changed. The Congress has told EPA pretty specifically what the limitations are, and EPA headquarters is sending guidances out to the regions for them to implement the new provisions. Those guidances are not very clear. The drafts we've seen of the National Contingency Plan are not very clear. In that situation you continue to have regional autonomy in deciding which way to proceed and how much to do.

I really think you need to—EPA needs to give the regions much more specific advice on what it is that they would like to have done. I would like to see some quotas. It may seem very simplistic, but just say we want this many enforcement cases, we want that many settlements, and we want this many whatever. Just give the regions some targets to aim at to do, so that regional personnel won't be able to say, "I don't bring 106 actions. I think that's a waste of resources." They shouldn't be able to say that. There ought to be that much guidance from headquarters that says, "You must do this along with the rest of what you're doing."

Senator LAUTENBERG. Senator Warner.

Senator WARNER. Mr. Chairman, I address to our distinguished panel the question which I raise again without, I really confess, a good, sound, factual knowledge as to whether or not we should even examine less than what I call 100 percent goal, recognizing the fiscal constraints and the time limitations. Does anyone—Ms. Warren, I know you have qualifications to address that issue. Is it one that we should be examining or not?

Ms. WARREN. I think that in the reauthorization some of those questions were examined. When you're talking—I don't know whether you're talking about 100 percent risk free or 100 percent of a site being cleaned up, but it's a complicated question. I don't think that establishing some percentage as the acceptable level of cleanup short of 100 percent guarantees you that you're not going to have to go back into that site later and spend even more money.

We've already seen a lot of money expended on cleanups that weren't successful and then you have to come back again. The whole thrust of the final SARA amendments is get permanent remedies, to do the job right this time so that we can go on and do the others and don't have to come back and won't have to worry about this site anymore.

I think it depends on the site whether a 90 percent cleanup will be sufficient, but it's a function of what's at that facility and what the toxicity of the material is there and the hydrogeology, and whether the remedy is going to be permanent.

Senator WARNER. Thank you. I wouldn't suggest that Congress try to legislate a percentage. My question, Is there sufficient flexibility in the laws to enable those better qualified than the Congress to make the decision as to whether or not 100 percent is a goal that should be pursued on every site or that they should accept something less than 100 percent, again recognizing that funds must be available for other sites and the time to clean up may be the last 10 percent equals the time that was required to clean up the first 90 percent? Therefore, we've got to look at the overall problem in America and give some flexibility to a few sites.

Mr. Moorman?

Mr. MOORMAN. Well, I think there's no question that there's a tradeoff between——

Senator WARNER. Is there flexibility in the statute, do you think, now?

Mr. MOORMAN. I think there's a problem in the statute. I think the problem has to do—I think the Agency is floundering over how much resources to put into each site and clean it up. The way it's now set up, they have what's called the ARARS process in which you import the standards from other environmental statutes, attempt to apply them to each Superfund site, and this is creating a lot of confusion and delay.

I think that National Priority List sites are a distinct sort of environment that probably should have their own standards and that, rather than try to go to the excruciatingly difficult process of trying to figure out site by site which standard from this law and which standard from that law should apply. The problem is that people don't know what 100 percent is without a standard; it's such a complicated thing. Consequently they are pouring too many resources in per site to make sure they don't miss something.

I think that whole ARARS process needs to be simplified and superfund standards need to be set. I don't know exactly what the standards should be. Obviously they have to satisfy the American people, but I don't think we know now what the standards should be. As a consequence, too many resources are going into individual sites, because EPA's afraid to "fail" at any site. They're afraid to finish with a site for fear that someone is going to come back and say, "It's not clean enough." It's a very tricky thing for EPA. What is too clean?

Senator WARNER. I think that's a very interesting answer. It makes it difficult.

We have a vote on which I'm sure you're aware. It is now the final few minutes of that vote. The chairman has to depart; I have to depart. I understand that Senator Stafford is to return and he will continue the questioning.

However, Ms. Warren, please feel free to respond to my question in my absence, and then at such time as you've completed we'll wait until a Senator reappears. I'll wait a minute here.

Ms. WARREN. I just wanted to say that we have looked at analyses that have been done of the first RODs that have come out, and it looks like a very ad hoc process is going on. EPA has not got the National Contingency Plan out yet. We don't have the process of applying the ARARS actually being implemented in a very routine way yet. So it's difficult to say whether, once that process is actually functioning, that it isn't working or it is working. We see case by case——

Senator WARNER. But is there sufficient flexibility in the statute in your judgment?

Ms. WARREN. I think there is.

Senator WARNER. There is in your judgment? I thank you.

[Brief recess.]

Senator LAUTENBERG. The meeting of the subcommittee will reconvene, Please come to order.

I would ask my colleague and good friend, Senator Stafford, who says that he had a few questions he would like to ask, to proceed.

Senator STAFFORD. Thank you very much, Mr. Chairman.

Mr. Moorman, this really isn't a question, but I looked at the law firm you belong to and I noticed the last name on it is Taft. Is that Robert Taft who was a Senator or is that another member of the family?

Mr. MOORMAN. Senator, Cadwalader, Wickersham & Taft is the oldest continuing practice of law in America, founded in 1792. Nobody in the firm remembers Cadwalader, Wickersham or Taft. Wickersham was an Attorney General, I think, for President William Howard Taft. Taft might have been one of President Taft's cousins. Who knows?

Senator STAFFORD. Well, that's very interesting.

Since Robert Taft was my seatmate for a while in the Senate, I was trying to connect him with your law firm, but I have missed by a couple hundred years.

Ms. Warren, I have a question or two for you. I have to say I missed some of what you had to say because those microphones, I suspect, came over on the *Mayflower* and, unless you speak directly into them, it's hard to hear what people are saying.

But attached to your testimony is a memorandum dated last July that says that the chemical and insurance industries, with the help of Ruckelshaus and some former members of this committee staff and the administration, are gearing up to possibly cripple Superfund law in 1991. Frankly, I'm disappointed that they didn't wait for the ink to dry on last year's law before apparently suggesting it's a failure. Where did you get these documents? I'm referring to the documents that are attached to your statement.

Ms. WARREN. They arrived under plain brown wrapper, I have to say.

Senator STAFFORD. I don't recall that they were testified to in connection with the Iran problem or anything else. So they're a new piece of evidence arriving in plain wrapper.

Do you how much money may be involved and who the individuals are in connection with these documents?

Ms. WARREN. Attached to our testimony is another set of documents that are dated October 26 which have the list of attendees at some of the meetings. I don't think there's anything wrong with the oil industry and the chemical industry and all of these people organizing. They had a big fight in 1986 and lost the battle. They want to come back and try it again in 1991. The thing that troubles us about it is who the leadership of the group is. It's very discouraging to think that the same people who came in and tried, first of all, to save the program at EPA and then to enforce it at the Justice Department would be taking leading roles in an effort which looks to us to be a flat-out attempt to prove that the law doesn't work. I can't help but think that the members of this group, knowing what their effort is, are going to make it come true and it will be a self-fulfilling prophecy. That's what's disturbing about it.

Senator STAFFORD. This is the document dated July 21, 1987, of Charls E. Walker Associates, Inc., here in Washington, DC.; is it not, addressed to Mr. Cornelius C. Smith, Jr., on the first page, which is a letter? Am I correct in that?

Ms. WARREN. Yes.

Senator STAFFORD. Mr. Chairman, this series of documents are matters which may be of concern to this committee. I would ask unanimous consent that it be made a part of the record of this hearing.

Senator LAUTENBERG. Without objection.

Senator STAFFORD. Finally, Ms. Warren, would you agree with the import of the documents in question—that last year's amendments to Superfund are a failure?

Ms. WARREN. I don't agree with that. I don't think that we're in a position to say that at this point or anywhere close to it. It seems to me that the amendments were directed at correcting problems in the agency's implementation of Superfund that were testified to at hearings by many, many people. I think we have to give it a chance. It seems to us that it's a sound law and that the strict joint and several liability standard is critical to it.

We've had discussions with State regulatory people who are implementing State superfund laws with that same liability standard, and they think that it is the one weapon that gets the settlers to the table, that gets the PRP's to come forward and talk, rather than the other way around. So I would hope that by the end of this research effort it will show that Superfund has, in fact, been a success rather than a failure.

I would also hope that really careful Senate and House oversight of EPA will keep the Agency's feet to the fire to make the law work. It just makes me ever more determined to try to make it work rather than the opposite.

Senator STAFFORD. Thank you very much, Mr. Chairman.

Senator LAUTENBERG. Thank you very much, Senator Stafford.

I have no further questions. Just once again, I would thank each of you for appearing with us and providing the testimony that you have. We'll get back to you with any questions that may arise and would ask that you respond promptly to them.

Mr. MOORMAN. Thank you, Mr. Chairman.

Senator LAUTENBERG. I would like now to have Dr. J. Winston Porter, accompanied by his colleagues and assistants, come to the witness table.

Just a reminder that this is an oversight hearing, and I'm going to ask each of you to be sworn. So please stand, if you will and raise your right hands.

I would ask: do you solemnly swear that the testimony that you'll give before this subcommittee is the truth, the whole truth, and nothing but the truth, so help you God?

[The witnesses respond "I do."]

Senator LAUTENBERG. Thank you.

Welcome to each member of the panel at the witness table.

Win, thank you for being here and assembling your colleagues. You, I am sure, listened to the testimony before you with relish and can't wait to confirm everything they had to say. But before you do that, I'd ask you please to introduce each of your associates.

I'm glad to see Chris Daggett from Region II, as I had requested.

STATEMENT OF J. WINSTON PORTER, ASSISTANT ADMINISTRATOR FOR SOLID WASTE AND EMERGENCY RESPONSE, ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC, ACCOMPANIED BY CHRISTOPHER J. DAGGETT, REGIONAL ADMINISTRATOR, REGION II; C. MORGAN KINGHORN, ACTING ASSISTANT ADMINISTRATOR, OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT; HENRY L. LONGEST II, DIRECTOR, OFFICE OF EMERGENCY AND REMEDIAL RESPONSE; GENE A. LUCERO, DIRECTOR, OFFICE OF WASTE PROGRAMS ENFORCEMENT; AND ROGER MARZULLA, ACTING ASSISTANT ATTORNEY GENERAL, LANDS AND NATURAL RESOURCES DIVISION, DEPARTMENT OF JUSTICE

Mr. PORTER. Thank you, Mr. Chairman.

I have with me Henry Longest, Director of our Emergency and Remedial Response Office; on my far right, Morgan Kinghorn is Acting Assistant Administrator for Administration and Resource Management, EPA; you've identified Chris Daggett already, EPA Regional Administrator of Region II; Gene Lucero the Director of Office of Waste Programs Enforcement; to my immediate left, Roger Marzulla, Acting Assistant Attorney General in the Department of Justice.

Shall I proceed?

Senator LAUTENBERG. Yes, please. Again, we'd ask you to limit your testimony. We'll put the clock on and promise you some patience, but not too long over the 5 minutes, Win.

Mr. PORTER. OK. Thank you, Senator Lautenberg.

I'm really delighted to be here, and I want to commend you for this hearing. I think perhaps the centerpiece of my administration has been the concept of speeding the pace of the Superfund Program while maintaining quality. I think this is a very timely hearing. We're working hard on speeding the pace. I really am delighted to have this opportunity to talk about some of our ideas as well as to listen to some of the ideas of others.

What I want to do today is very briefly summarize the progress we have made, some of the areas for improvement that I see we need to make. I must say I was very interested in the comments of the previous witnesses. I think they were good comments, and we'll certainly take them to heart.

Let me run through quickly the process we use and kind of tell you where we are. First, with respect to emergency removals, which is a very key part of the program, often overlooked, we have completed over 1,000 emergency removals. I think that part of the program has worked quite well. We are trying to expand that authority pursuant to the law and see if we can do a larger fraction of the cleanup at a site under the removal authority.

On the front end of the process, as you know, we do a preliminary assessment at every site. I am happy to report today that we expect to do the 5,180 preliminary assessments required by law by December 31 of this year. The law requires us to do preliminary assessments at all sites in our inventory at the time of enactment. It looks like we're going to make that. So we are working hard on keeping the front end of the pipeline full.

Regarding the study phase, which has come in for a lot of dialogue today as a central part of the program, the RI/FS phase, we started over 600 RI/FS's. We have about 500 in progress right now. Definitely room for improvement is needed.

One of the things I've said is that we want to start shooting for completion of RI/FS's in 18 months. As a general matter, the regions are responding to that directive. We can talk more about that if you would like. We must really take a close look at the process. It, undoubtedly, is taking too long, and that was enunciated by several of the previous witnesses.

I think my experience in the consulting engineering business is that an expeditious study is frequently a better study than one which is languid. I want to move hard on trying to expedite the process—and I don't think 18 months is breakneck speed. I think it is a reasonable timeframe. I think we should shoot as a general matter for doing RI/FS's in about 18 months. Some will take longer. Some of these jobs are very complex, but as a general matter I think 18 months is a reasonable goal.

A record of decision is the fundamental decision of what we do at a site in terms of the selection of remedy, and we have completed 230 records of decision. We have sent out some guidance this summer on nine criteria to be used in making those decisions. Certainly I'm concerned, as one witness indicated, about the bunching at the end of the year. I'll talk more about that in just a minute because that is not a good process, and we're trying very hard to spread those decisions out over the year.

With regard to remedial designs or remedial actions, the design engineering part of the program, we started about 180 or 190 of both since inception. We have in progress about 100 remedial designs now and about 60 remedial actions. We have a number of areas to speed those up.

For example, when the Corps of Engineers does the design engineering, we've had a problem because they do a site-specific procurement of a consulting architect engineering firm. That has taken some time. We're trying to work with them so they have contractors onboard so that when we get to the design phase the contractors can proceed directly without waiting to procure another consultant.

Completions—that is, sites deleted from the NPL—or sites in which we are beginning longer term operation and maintenance, include 29 in that category, up from the famous 6. We do expect 25 to 30 more completions this year. I want to correct one thing that was implied earlier. I said 25 to 30 completions, meaning this year and perhaps next. I'm not looking for 30 years of 30 completions a year. We have seen a continual increase in that process. I would like for the program to get into a steady state where the number of sites going on the NPL each year are approximately equivalent to the number coming off the list. We don't want to just increase the queue. Regarding the 25 to 30 sites, that we are hoping to complete over the next year or two, I think we have to do better than that. We have to catch up quite a bit more on completions.

A couple of areas of improvement that we are instituting, as I think you know, involve a project management approach. We really think we can save quite a bit of time by minimizing the number of handoffs in phases of the program. So we're procuring more contractors who, in fact, on a site-specific basis will be assigned total responsibility for a job from a technical standpoint. The Agency will make the policy decisions; the contractors will do the technical work.

We're using a proactive memo which I'm sending out to the regional administrators each quarter defining the work to be done that quarter. The proactive memo is an effort to smooth the work load, among other things.

For example, this quarter we expect to do 30 RODs, which is precisely one-fourth of the total for the year. I recently called all 10 regional administrators, went through all 30 RODs, all 13 remedial designs, all 7 remedial actions, all 27 settlements, and all 8 deletions due this quarter. Most of those are on track. I'm trying to get people really focused on those on a quarterly basis.

With respect to enforcement, we've had settlements, about $750 million at 473 sites. We've recovered $75 million to the fund. I do want to increase the amount of work done by private parties from about a third to about a half, and I think we're heading in that direction.

So concerning improvements which we instituted in the past six months or so—we're setting deadlines for negotiations where only the regional administrator or myself can extend the deadline. That's had, I think, a very beneficial effect on getting people focused on completing negotiations so that things don't drift on for a long period of time.

Let me conclude, Mr. Chairman, by saying that this is obviouisly a very technically and legally complex program. My feeling is that we have a good law. I'm trying to do everything I can to make the law work. I think that we are will note a lot of progress this year. I look at this as a very big year for Superfund. My first year was a slowdown year because we were running out of money. My second year was spent ramping up the programs after reauthorization. This year we should have a steady flight with about 700 projects underway. It is a big program with a lot of work being conducted.

Let me provide you with some numbers on starts because people criticize us for not being clear-cut. This year we want to start 105 RI/FS's, 129 remedial designs, and 67 remedial actions. We hope to get about 87 settlements with private parties. We expect to cover about $65 million in cost recovery. We expect to have 16 deletions from the NPL and about 8 sites completed.

Now I'm not going to say I want to be held precisely to every one of those numbers, but I'm not afraid to mention those kinds of numbers because I think we can accomplish that.

That concludes my testimony, Mr. Chairman. I think we're making real progress. We've got a long way to go, and I was very impressed with your 16 criteria. I'd like to work with you on those 16 areas of improvement. There are some areas for improvement that I've talked about, some that you have discussed and some that other witnesses have discussed and I think these recommendations form solid basis to go forward from here.

Thank you.

Senator LAUTENBERG. Thank you very much.

A number of points obviously are in disagreement between your observations and those of the other witnesses. I take it from your comments that you think this is part of the normal buildup for a responsibility as complex as superfund. But we do have these radical differences, do we not, between the regional performances? Do you agree, first of all, that there are substantial differences among the regions?

Dr. PORTER. Yes, Mr. Chairman, I do. I think there are reasons for some of the differences. It certainly isn't like one region is working hard and another one is not. I think that what we've got here are some issues.

For example, in settlements last year, most of the settlements we got with responsible parties were in two or three regions. There's a variety of reasons for that, and Lee Thomas and I have asked all the regional administrators to work hard to even out that performance. I think that we're going to have to get everybody working on all aspects of the program and taking it equally seriously. Some people had philosophical differences in the sense of how to go about the program, so I think there are differences. I don't think it's because people aren't working hard; I think they're all working very hard. But we do need to work on better uniformity within the regions.

Senator LAUTENBERG. You're now giving us a blanket statement that says that each of them performs as efficiently as the other; it's just that the various complexities, and so forth, permit one region to move ahead with more conclusive results? Is that what you're saying.

Dr. PORTER. No, I think there's more to it than that. I think settlements is perhaps a good area to focus on. There are many others.

For example—and I'll be candid about this—with respect to settlements, some regions have picked up on the concept for example, of mixed funding more quickly than others. I think they've all gotten the message now, but I think 6 or 8 months ago, perhaps a little earlier, some regions were more aggressive in use of that tool which the law gave us; some were not as aggressive. I think there have been some philosophical differences we need to work on.

Senator LAUTENBERG. I'd like to examine that a little bit further, and I'll get back to it. I think that you have to analyze what it is that produces the larger settlement numbers, what contributes to more studies being done, more remedial designs. We need to look at these questions because I'm not inclined to accept the assertion, Win, that we have just a little more complication in one or the other. There's an abundance of information that says in a couple of places it seems to operate more efficiently and that gets back to central management here in town. I, again, would discuss it.

I want to ask you or Chris Daggett about the Global landfill situation in New Jersey. I wonder whether you can confirm what Region II staff has told you about the plan to list Global on the NPL. Chris, if you want to respond— where do we stand with that?

Mr. DAGGETT. That will be proposed for listing in the next update which is scheduled for January.

Senator LAUTENBERG. For January.

Mr. DAGGETT. It doesn't mean that it will be listed in January. It's been proposed—it goes on the proposed list, as you know.

Senator LAUTENBERG. Yes. Therefore, would you be taking any remedial action there in advance of its listing? Would you be preparing a schedule or a plan for moving into that, or do you wait until the site has been listed?

Mr. DAGGETT. Any formal work would await listing, but obviously if there is to an emergency of some kind, we don't need to be either on the list or in any status relative to the NPL. So we'd be prepared to move as necessary.

At the present time we don't see such an emergency situation to have us go in and do something right at the moment.

Senator LAUTENBERG. In the selection of a site to go on the list, the criteria used are fairly easy to evaluate. Is it a question of competition for room on the list? There's no limit to the numbers that can be added? Does this site look, based on the information—you have quite a bit of information on this site—like it will be listed?

Mr. **Daggett**. We now do, yes. Originally, back in late 1985 or 1984—I've got to get the right date here—I guess it was in mid-1985 it was first proposed in our review, but we didn't feel that the data were sufficient enough to make a decision or that we did not agree actually with the State numbers that were put in. The State ranked it slightly over the 28.5 cutoff score. When we went through it, we saw it as not reaching that ranking. We asked for additional information that finally came in only this past June, I believe it was. When we received that information, we concurred with the new assessment which puts it somewhere— although it's under quality assurance review right now, it's somewhere in the low forties, the HRS score, and we anticipate that it, indeed, will be put on the list.

Senator **Lautenberg**. You said that you don't see anything right now that tells you emergency action has to be started there.

Mr. **Daggett**. That's correct.

Senator **Lautenberg**. When would you make that kind of a decision firm?

Senator Pressler, I'm sorry, did you want to ask a couple of questions?

Senator **Pressler**. No, I left my questions with staff. Thank you very much.

Senator **Lautenberg**. Thank you.

When might you get to a point where you can firm up the decision if we've got a problem there? Are you saying that you've done a sufficient amount of study there or ready to say it doesn't it?

Mr. **Daggett**. I'm saying to you now that we don't have any evidence that warrants us to going in and taking some sort of an action in the removal program. We don't see it through air or ground water. I believe there are monitoring systems in place that will hopefully enable us to get an early warning of any kind of a problem. If necessary, we'll take an emergency action.

Senator **Lautenberg**. Mr. Kinghorn or Chris Daggett, Region II staff indicate that headquarters allowed the contractors serving New Jersey and other areas to commit beyond its resources. This required, then, switching contractors, and a lot of time was lost and perhaps we added as much as 6 months to projects in New Jersey. Are you familiar with this situation? Why did it happen? What do we do about preventing it in the future?

Mr. **Kinghorn**. Mr. Chairman, I think I can at least give an overview of that. Generally what happens in these large contracts, this one in particular, but many of them, are assigned certain hours. When we get into many of these sites, we find that the work may, indeed, require more hours than was assigned to that particular project.

I don't think we at any particular point in time plan under the contract more hours than are under the contract, but at points when a region comes back and says, "We've done it and we need more hours," we then have to make a decision, in effect, if that's the highest priority site, move other sites off to another contract. I think that's what happened in this particular instance. I think it happens in other instances. There are delays because you're switching contractors. The work doesn't stop. We have the capacity, but it can be a problem.

We hope under the ARARS, which is the new process, that because of the much larger capacity and the flexibility there, that, in effect, that issue will be lessened. But the sites are complex and it is a real problem. When you get into a site and need more hours to continue, we then have to make some prioritization.

I'll let Chris answer perhaps in more detail.

Senator LAUTENBERG. Chris.

Mr. DAGGETT. There's no question that it's hard to stay on top of the amount of hours required as you move through a site. The bottom line is, for whatever series of reasons, there was an exceedence of the hours of the contract, was the REM III contract, I believe, the national contractor. At that point in time there was a requirement you couldn't go beyond the hours, so we had to make the adjustments. In the adjustments it did fall somewhat hard on our region, although I think other regions also had difficulties. I don't mean to imply that we were the only ones.

What happened was we had to shift contractors in midstream in some cases. Of course, when you're handing off a contract from one firm to another, you're going to encounter delays that are going to be hard to overcome. But there's no question that we've encountered some delays as a result of that problem.

Dr. PORTER. Senator, may I also comment on that. We want to avoid that in the future. We obviously want to keep one contractor at a site. But with 500 sites and trying to project all the workloads, we had a couple of disconnects.

One thing that's happened across the country is and this gets back to the RI/FS process—those studies have overrun in many cases time and dollars. We've had to keep increasing our estimate of how much money would go into those sites.

So we want to do two things: First, we at headquarters have to do a better job of projecting across the board of those 400 or 500 studies. Second, I want the regions to realize there's not unlimited time or money for the studies. I think we have to work on the problem from both ends.

But I don't think the disconnection—As Chris Dagget said, those projects are not going to languish. We're going to keep them moving, but it was not a good situation to have to change contractors in the middle of the study.

Senator LAUTENBERG. Well, I think that we come down to a point where we have to have better skill, better planning, at the top that says when these contracts are awarded we ought to have some sense of how much we're straining the resources, how much we're asking of a given resource, to get this job done.

It's not sufficient, as you very well know, all of you, to say, OK, well, the job turned out to be a lot more complicated; we had more hours. At some point we ought to know that when we issue a contract we make an agreement that there ought to be some reliability in terms of a target date, because you don't need many of these to bring the program to a slowdown, if not a halt, or to a pace that's totally unacceptable for you, for us, and for the community.

I want to discuss that. I do want to call on Senator Stafford, but I'll take a minute and get back to it.

Mr. DAGGETT. Senator, if I could comment on that—I think it underscores something Mr. Kinghorn mentioned: the alternative remedial contracting strategy. That's the very sort of thing that we want to be able to address by expanding the number of contractors. It gives us a little bit better oversight.

One of the problems you have is if a contractor comes in and has a national contract and on your project in your region wants some additional hours, it's hard to play a game of hard ball with them, when they have a national contract in a way that you can when it's just that one contractor on maybe three or four sites in the region, and you can start to really hammer them about coming in on budget, on time, and to do the work necessary. There's a better accountability system, I think, that we can build in in this new ARCS program. We're all anxious to get it off the ground.

I think the first contract will be let this month actually, and in our region we'll have several more contractors onboard by the middle of the next calendar year at the latest. We're hopeful that that's the very thing that can bring accountability that you want, I know, and that certainly we share that same desire.

Senator LAUTENBERG. Senator Stafford.

Senator STAFFORD. Thank you very much, Mr. Chairman.

Dr. Porter, first, I listened to your verbal statement and I had a chance to read a good share of your prepared statement. I was impressed with the number of operations you've now got going.

Looking at page 15 of your statement, you say, "We have made significant progress." On that basis, do you consider that the Superfund during this year and under the 1986 amendments has been a failure?

Mr. PORTER. No, sir, I definitely do not. I think that the program is working fairly well right now. We certainly have plenty of room for improvement, but I think we've successfully worked through many of the provisions in the law. It took us 3 to 6 months to develop the appropriate guidances and so forth. But I would certainly not be naive and say that everything is working perfectly. I also would say that people need to thinking about what should be done in the next 5 to 10 years and everything need not be absolutely the same as it has been in the past 5 years.

On the other hand, I think that right now my job is to do the best job I can to make the law work, and I think we can.

Senator STAFFORD. I'm sure you were in the audience, were you not, while Ms. Warren was testifying and you heard her, in that case, mention the document which is attached to her testimony with reference to the Charls Walker Associates and William Ruckelshaus Associates as far as setting up an organization which seems to have the intention of drastic changes in Superfund in 1991, which would be the next time it might be up for consideration.

I note in those documents, on page 2 of one of them, it says and I'm quoting, "If Superfund continues to fail," I gather you would disagree with that characterization of Superfund.

Dr. PORTER. Yes. Perhaps I'm not totally objective, but I don't think it's failing. I think it's beginning to succeed. It has been a rough start, but I think we're doing well right now.

Senator STAFFORD. All right. Apparently the two associations under Walker and Ruckelshaus, and with Lee Fuller and Henry Habicht, and staff will be working under this agreement—this association assuming it comes to fruition—and the documents thus far reflecting those two associations indicate that there have been discussions with key members of the executive and legislative branches and their staffs. Have you had any discussions with any of the four people I have named?

Dr. **Porter**. Yes, sir. Lee Fuller and Phil Angel came to see me one day for about half an hour to tell me what the general size and shape of their study was. That's the exposure I've had.

Senator **Stafford**. That's the extent of the discussion you had with them? Would you know of your own personal knowledge of any discussions between Lee Thomas and Bill Ruckelshaus?

Dr. **Porter**. I'm not aware of any, but I don't know.

Senator **Stafford**. All right. Mr. Chairman, I have no further questions.

Dr. **Porter**. Mr. Stafford, may I just make one closing comment on that, if I can?

Senator **Stafford**. Yes.

Dr. **Porter**. I'm not for or against that particular effort. I just don't know how to characterize it. It seems to me people are going to start on all sides of the equation before long, thinking about the next reauthorization of Superfund. We're already well over a year into Sara. There's going to be a lot of ongoing work. When we end this 5 years, there will be hundreds and hundreds of projects in progress. People have to think hard about the best way to keep that work going.

I just don't know what the right approach is, but I don't think we should necessarily say that's a good or bad effort at this point.

Senator **Stafford**. The Senator from Vermont isn't challenging the legality of taking the steps that Walker Associates and Ruckelshaus Associates may wish to take looking to 1991. I am offended somewhat at the characterization that Superfund is a failure, and I'm surprised that Mr. Ruckelshaus, after his distinguished career with EPA, would be a part of this association, but that's his legitimate business if he wishes to pursue it.

[Subsequent to the hearing, the following was submitted for the record:]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 19 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Follow-up to Lautenberg Hearing — December 10, 1987

FROM: Henry L. Longest II, Director
Office of Emergency & Remedial Response

TO: J. Winston Porter
Assistant Administrator

ATTN: Lynn Pirozzoli

In response to the inquiry from Senator Stafford concerning conversations with William Ruckleshaus, Lee Fuller, or Henry Habicht on the subject of the failure of SARA and "joint and several liability", I wish to make the following statement for the record:

> I participated in discussions with Phil Angel and Lee Fuller on the general topic of the process of their studies. I did not discuss any alleged failure of the amendments or the subject of joint and several liability.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 20 1988

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

MEMORANDUM

SUBJECT: Follow-up from the December 10, 1987
Superfund Hearing

FROM: C. Morgan Kinghorn
Acting Assistant Administrator

TO: Lynn Pirozzoli
Special Assistant

I have reviewed the questions submitted by Senator Stafford pertaining to issues discussed at the December 10, 1987 Superfund Hearing. My responses are described below:

1) I have not discussed the new Superfund working group formed by Charles Walker and Bill Ruckelshaus with anyone.

2) I do not agree that the last year's amendments are a failure. I have no problems with the answer provided by OWPE on this issue.

3) I concur with OWPE's position to retain strict, joint and several liability.

Please call me or Marian Cooper if you have any additional questions.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 21 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Response to Stafford Questions

FROM: Gene Lucero, Director Gene Lucero
Office of Waste Programs Enforcement

TO: Lynn Pirozzoli

This memorandum is in response to the questions submitted by Senator Stafford as follow-up to the December 10 Lautenberg hearing. The answers are as follows:

1. Have any of you discussed this group or its activities with any of the people I named?
I have not discussed Charles Walker Associates group with Walker, Fuller, Ruckelshaus, or Habicht. I have spoken with the latter two individuals on other matters.

2. Do you agree with them that the last year's amendments are a failure?
If their position is characterized this way, I do not agree that last year's amendments are a failure. However, I do not understand the position of this group to be that the amendments are a failure.

3. Should we get rid of strict, joint and several liability?
My position, stated several times in hearings before the full Environment and Public Works Committee, is that the standard of liability established under CERCLA is a valuable tool for pursuing successful enforcement, promoting voluntary clean up, and improving waste management practices.

Senator STAFFORD. For Senator Pressler, who had to leave, I would ask you this question: In terms of the new, remedial contracting procedures you've proposed, why can't the schedule for implementation by the regions be speeded up?

Dr. PORTER. Well, we are addressing that right now. We're awarding these contracts right now for two of our regions. We have several more coming. We expect to have all of those done by the end of this fiscal year. We are moving as rapidly as we can. As Chris Daggett indicated, we want to have more ability to assign contracts on a site-specific basis, have more competition, and have them take on a whole project. We're really pushing that.

Mr. DAGGETT. But with respect to the question regarding the site cleanups themselves as to whether they could be speeded up, I think that we would probably all argue our hope—that with better management control over those contractors, we can, indeed, use that as another tool, to collapse the timeframe more effectively here.

Senator STAFFORD. Thank you.

Just for the clarity of record, would you again state your name so that we'll hear that that was your testimony?

Mr. DAGGETT. My name is Christopher Daggett. I'm the Regional Administrator for Region II, which is New York, New Jersey, Puerto Rico, and the Virgin Islands.

Senator STAFFORD. Thank you.

Thank you, Mr. Chairman.

Senator LAUTENBERG. Thank you, Senator Stafford.

I take it the fact that you've decided to spend more time in Vermont and various other places over the next years doesn't mean that you've abandoned the project and that in 1991 when I need help, I hope that I'm going to be able to call on you.

Senator STAFFORD. Well, Mr. Chairman, I may no longer be in the Senate, but I may likely come back down here in 1991.

Senator LAUTENBERG. With your own association?

Senator STAFFORD. It will be a low-budget operation.

Senator LAUTENBERG. Excuse me, I didn't catch this cold in Vermont; I don't know where I caught it.

Senator STAFFORD. You should have stayed up there.

Senator LAUTENBERG. I should have; you're right.

Mr. Daggett, in April you indicated that Region II had about $80 million allocated for New Jersey.

Mr. DAGGETT. That's correct.

Senator LAUTENBERG. But only about $50 million was actually spent and the rest went back into the national kitty, if I can call it that. Why did this happen, Chris, and what are we doing to be sure that New Jersey's allocation of resources, now about $230 million, is going to be spent in New Jersey and in the time that we expected it to be, keeping in mind that we want it done efficiently? We just don't want to throw money at problems.

But we have an opportunity in New Jersey, burdened with so many of the high priority sites, it's got quite a task on its hands.

Mr. DAGGETT. First of all, the difference between the approximately $55 million that we ended up obligating and the $80 million that was allocated is primarily around the Bridgeport site, which was the $24 million project. That's rolling into this fiscal year when we're funding it.

With respect to the $230 million, we anticipate moving quite a bit through that amount of money. It's dependent in part on completing some of the designs, frankly, that we have underway. In particular, the GEMS landfill, the Kramer landfill—and I've lost my paper on the third site, but, frankly, I'm not sure if we're going to complete one of those designs. We expect to get at least two of the three and we're hoping on the third with some more pressure on it, but, again, it's a matter of our keeping our thumb on top of people as they have to go through this stage of the process and, assuming they can complete it, then we would anticipate obligating that amount of money.

Senator LAUTENBERG. I'd urge you to do just that, and that is to keep the pressure on because none of these things are going to happen. The last thing, Dr. Porter, that you want is to have an impression out there that EPA Superfund is not getting the job done because we're not seeing a decent output in terms of the number of sites that begin study, designs and so on.

But you'll give that impression and you know there have been suggestions, if not accusations, that your agency is dragging its feet, deliberately or otherwise is by not having enough contracts issued, enough actions started because you don't have the structure, the people, and the programs in place.

You sure have a monumental task because I know we shared with Senator Stafford as the chairman of the full committee the concerns about the fact that people were leaving at the time that the old Superfund was terminating and the new one being created and the fact that we'd have to ramp up. Well, it's now over a year later and we're still talking about high turnover and insufficient staffing to get the job done.

When we see the funding available and not being used efficiently, it suggests that EPA is again deliberately or otherwise, not spending the money that it had. I don't want the money thrown away. That's certainly not the case, but we have to get ourselves into a process that says the money can be used efficiently.

You suggested a scorecard of sorts, quotas for it, and said you didn't want to be held to that precisely.

Dr. PORTER. I don't want to be held to a precise number, but I would certainly be willing to be held very close to a specific goal. One reason I wanted to go on record is because I think we're going to achieve those numbers.

Senator LAUTENBERG. Right, but when? What that suggests also is that if we take enough of the easier sites, we can bundle a bunch of them in there and hit the target, but that would be wrong for my State and the country.

Dr. PORTER. Yes.

Senator LAUTENBERG. We have these complicated sites that are in many cases large in scope, with effects on the communities nearby, and those must be addressed. The Bridgeport site, how much is that site now expected to cost?

Mr. DAGGETT. $50 million.

Senator LAUTENBERG. $50 million. So if we get 20 small ones or 20 simple ones, that's not going to address the priorities.

Dr. PORTER. Mr. Chairman, let me correct that if I can. I would be very happy to share with you real sites with real names, We're not just talking about numbers. We have here real sites: Love Canal, Times Beach, Lipari landfill, et cetera. I want to be held, frankly, not only to the approximate numbers, but the real sites.

Senator LAUTENBERG. We would like you to submit those for the record.

Dr. PORTER. Yes, I will be happy to do that.

[Material referred to follows:]

FY 1988 SUPERFUND
SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
FIRST RI/FS START PRP	WILSON FARM	NJ	RP	88/1	88/4			/ /	/ /
	TOTAL PLAN / TARGET:......................			9	6				
SUBSEQUENT RI/FS STARTS PROGRAM	AMERICAN THERMOSTAT CO.	NY	F	88/2	88/2			/ /	/ /
	MONTGOMERY TOWNSHIP HOUSING	NJ	S	88/2	88/2			/ /	/ /
	VOLNEY MUNICIPAL L/F	NY	S	88/1	88/2			/ /	/ /
	WALDICK AEROSPACE DEVICES	NJ	F	88/2	88/2			/ /	/ /
	TOTAL PLAN / TARGET:......................			4	4				
SUBSEQUENT RI/FS STARTS ENFORCEMENT	CIBA GEIGY CORP.	NJ	FE	88/3	88/2			/ /	/ /
	PIJAK FARM	NJ	FE	88/1	88/1			/ /	/ /
	SPENCE FARM	NJ	FE	88/1	88/1			/ /	/ /
	VEGA ALTA PUBLIC SUPPLY WELLS	PR	FE	88/2	88/2			/ /	/ /
	TOTAL PLAN / TARGET:......................			4	4				
SUBSEQUENT RI/FS STARTS PRP	KIN-BUC LANDFILL	NJ	RP	88/4	88/4			/ /	/ /
	OLEAN	NY	RP	88/2	88/2			/ /	/ /
	TOTAL PLAN / TARGET:......................			2	2				
FIRST RI/FS COMPLETIONS PROGRAM	AMERICAN THERMOSTAT CO.	NY	F			88/1	88/1	7/10/87	/ /
	BEACHWOOD/BERKLEY WELLS	NJ	S			88/4	88/2	1/13/84	/ /
	CLOTHIER DISPOSAL	NY	S			88/2	88/4	12/22/84	/ /
	ELLIS PROPERTY	NJ	S			88/4	88/3	9/26/84	/ /
	FULTON TERMINALS	NY	F			88/1	88/3	12/28/84	/ /
	GLEN RIDGE RADIUM SITE	NJ	F			88/2	88/1	12/13/84	/ /
	MONTCLAIR/W.ORANGE RADIUM	NJ	F			88/2	88/1	12/13/84	/ /

FY 1988 SUPERFUND
SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
FIRST RI/FS COMPLETIONS PROGRAM	PEPE FIELD	NJ	S			88/4	88/4	9/26/84	/ /
	REICH FARMS	NJ	F			88/3	88/3	9/28/84	/ /
	TABERNACLE DRUM DUMP	NJ	F			88/2	88/2	3/29/85	/ /
	VINELAND CHEMICAL CO., INC.	NJ	F			88/4		5/21/86	/ /
	YORK OIL COMPANY	NY	S			88/1	88/1	9/27/83	/ /
	TOTAL PLAN / TARGET:........................					12	11		
FIRST RI/FS COMPLETIONS PRP	ASBESTOS DUMP	NJ	RP			88/3	88/3	4/ 4/85	/ /
	CHEMICAL LEAMAN TANK LINES	NJ	RP			88/3	88/3	7/15/85	/ /
	CIBA GEIGY CORP.	NJ	JT			88/2	88/1	3/30/84	/ /
	GE WIRING DEVICES	PR	RP			88/3	88/3	1/16/84	/ /
	KIN-BUC LANDFILL	NJ	RP			88/2	88/2	9/23/83	/ /
	RINGWOOD MINES LANDFILL	NJ	RP			88/3	88/3	6/26/87	/ /
	UPJOHN FACILITY	PR	RP			88/1	88/1	6/26/87	/ /
	TOTAL PLAN / TARGET:........................					7	7		
SUBSEQUENT RI/FS COMPLETIONS PROGRAM	BREWSTER WELL FIELD	NY	F			80/3	88/3	3/30/87	/ /
	LIPARI LANDFILL	NJ	F			88/2	88/1	3/ 7/85	/ /
	LOVE CANAL	NY	S			88/2	88/2	9/28/84	/ /
	MARATHON BATTERY CORP	NY	F			88/3	88/3	12/31/85	/ /
	MARATHON BATTERY CORP	NY	F			88/3	88/4	9/14/87	/ /
	YORK OIL COMPANY	NY	S			88/2	88/2	5/19/86	/ /
	TOTAL PLAN / TARGET:........................					4	6		
SUBSEQUENT RI/FS COMPLETIONS ENFORCEMENT	OLEAN WELL FIELD	NY	FE			88/4		9/23/87	/ /

FY 1988 SUPERFUND
SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
SUBSEQUENT RI/FS COMPLETIONS PRP	LONE PINE LANDFILL	NJ	RP			88/4	88/3	9/30/85	/ /
FIRST RD START PROGRAM	AMERICAN THERMOSTAT CO.	NY	F	88/2	88/2			/ /	/ /
	BEACHWOOD/BERKLEY WELLS	NJ	S	88/4	88/4			/ /	/ /
	CLOTHIER DISPOSAL	NY	F	88/4	88/1			/ /	/ /
	FULTON TERMINALS	NY	F	88/3	88/2			/ /	/ /
	GLEN RIDGE RADIUM SITE	NJ	F	88/2	88/2			/ /	/ /
	HAVILAND COMPLEX	NY	F	88/2	88/2			/ /	/ /
	KATONAH MUNICIPAL WELL	NY	F	88/1	88/2			/ /	/ /
	MONTCLAIR/W.ORANGE RADIUM	NJ	F	88/1	88/2			/ /	/ /
	MONTGOMERY TOWNSHIP HOUSING	NJ	S	88/1	88/1			/ /	/ /
	TABERNACLE DRUM DUMP	NJ	F	88/3	88/2			/ /	/ /
	VOLNEY MUNICIPAL L/F	NY	F	88/2	88/1			/ /	/ /
	WALDICK AEROSPACE DEVICES	NJ	F	88/1	88/1			/ /	/ /
	WILLIAMS PROPERTY	NJ	S	88/2	88/2			/ /	/ /
	YORK OIL COMPANY	NY	F	88/3	88/3			/ /	/ /
	TOTAL PLAN / TARGET:........................			14	14				
FIRST RD START PRP	CIBA GEIGY CORP.	NJ	RP	88/3	88/3			/ /	/ /
	DIAMOND ALKALI	NJ	RP	88/2	88/2			/ /	/ /
	GE WIRING DEVICES	PR	RP	88/4	88/4			/ /	/ /
	KIN-BUC LANDFILL	NJ	RP	88/4	88/4			/ /	/ /
	RENORA INC.	NJ	RP	88/1	88/1			/ /	/ /
	RINGWOOD MINES LANDFILL	NJ	RP	88/4	88/4			/ /	/ /
	UPJOHN FACILITY	PR	RP	88/3	88/3			/ /	/ /

FY 1988 SUPERFUND
SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
FIRST RD START PRP	VEGA ALTA PUBLIC SUPPLY WELLS	PR	RP	88/2	88/2			/ /	/ /
	TOTAL PLAN / TARGET:......................			8	8				
SUBSEQUENT RD START PROGRAM	BREWSTER WELL FIELD	NY	F	88/4	88/4			/ /	/ /
	CHEMICAL CONTROL	NJ	F	88/2	88/2			/ /	/ /
	LIPARI LANDFILL	NJ	F	88/3	88/2			/ /	/ /
	LOVE CANAL	NY	S	88/2	88/2			/ /	/ /
	LOVE CANAL	NY	S	88/4	88/4			/ /	/ /
	MARATHON BATTERY CORP	NY	F	88/4	88/4			/ /	/ /
	PIJAK FARM	NJ	F	88/1	88/1			/ /	/ /
	SINCLAIR REFINERY	NY	F	88/1	88/1			/ /	/ /
	SPENCE FARM	NJ	F	88/1	88/1			/ /	/ /
	YORK OIL COMPANY	NY	S	88/4	88/4			/ /	/ /
	TOTAL PLAN / TARGET:......................			10	10				
SUBSEQUENT RD START PRP	G.E. MOREAU	NY	RP	88/1	88/1			/ /	/ /
	HOOKER (S-AREA)	NY	RP	88/1	88/1			/ /	/ /
	HOOKER (S-AREA)	NY	RP	88/3	88/3			/ /	/ /
	TOTAL PLAN / TARGET:......................			3	3				
FIRST RD COMPLETIONS PROGRAM	AMERICAN THERMOSTAT CO.	NY	F			88/3	88/3	/ /	/ /
	BOG CREEK FARM	NJ	F			88/3	88/3	9/16/86	/ /
	CALDWELL TRUCKING	NJ	F			88/1	88/1	4/22/87	/ /
	COMBE FILL NORTH LANDFILL	NJ	S			88/3	88/2	3/31/87	/ /
	COMBE FILL SOUTH LANDFILL	NJ	S			88/4	88/3	6/26/87	/ /
	ENDICOTT VILLAGE WELLFIELD	NY	F			88/3	88/3	9/23/87	/ /

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SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
FIRST RD COMPLETIONS PROGRAM	GEMS LANDFILL	NJ	S			88/3	88/3	5/22/86	/ /
	GLEN RIDGE RADIUM SITE	NJ	F			88/3	88/3	/ /	/ /
	HAVILAND COMPLEX	NY	F			88/4	88/4	/ /	/ /
	HELEN KRAMER LANDFILL	NJ	F			88/2	88/2	5/ 8/86	/ /
	HUDSON RIVER PCB'S	NY	S			88/1	88/1	9/28/84	/ /
	KATONAH MUNICIPAL WELL	NY	F			88/4	88/4	/ /	/ /
	KENTUCKY AVENUE WELL FIELD	NY	S			88/2	88/2	6/26/87	/ /
	LANG PROPERTY	NJ	F			88/3	88/2	3/20/87	/ /
	LONE PINE LANDFILL	NJ	F			88/4	88/2	9/28/84	/ /
	METALTEC/AEROSYSTEMS	NJ	F			88/2	88/1	3/26/87	/ /
	MONTGOMERY TOWNSHIP HOUSING	NJ	S			88/2	88/2	/ /	/ /
	WIDE BEACH DEVELOPMENT	NY	F			88/4	88/4	5/31/86	/ /
	TOTAL PLAN / TARGET:......................					12	12		
FIRST RD COMPLETIONS PRP	DIAMOND ALKALI	NJ	RP			88/4	88/4	/ /	/ /
	OLEAN WELL FIELD	NY	RP			88/1	88/1	2/15/86	/ /
	PIJAK FARM	NJ	RP			88/2		4/15/85	/ /
	RENORA INC.	NJ	RP			88/4	88/4	/ /	/ /
	SPENCE FARM	NJ	RP			88/2		4/15/85	/ /
	SHOPE OIL & CHEMICAL CO.	NJ	RP			88/4	88/4	8/15/86	/ /
	UPJOHN FACILITY	PR	RP			88/4	88/4	/ /	/ /
	TOTAL PLAN / TARGET:......................					7	5		
SUBSEQUENT RD COMPLETIONS PROGRAM	BRIDGEPORT RENTAL & OIL SVCS	NJ	F			88/1	88/1	9/30/87	/ /
	LIPARI LANDFILL	NJ	F			88/1	88/1	5/ 8/86	/ /

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SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
SUBSEQUENT RD COMPLETIONS PROGRAM	SINCLAIR REFINERY	NY	F			88/2	88/2	/ /	/ /
	TOTAL PLAN / TARGET:........................					3	3		
SUBSEQUENT RD COMPLETIONS PRP	G.E. MOREAU	NY	RP			88/2	88/2	/ /	/ /
FIRST RA START PROGRAM	AMERICAN THERMOSTAT CO.	NY	F	88/4	88/3			/ /	/ /
	BOG CREEK FARM	NJ	F	88/4	88/4			/ /	/ /
	CALDWELL TRUCKING	NJ	F	88/4	88/2			/ /	/ /
	COMBE FILL NORTH LANDFILL	NJ	S	88/4	88/3			/ /	/ /
	COMBE FILL SOUTH LANDFILL	NJ	S	88/4	88/4			/ /	/ /
	ENDICOTT VILLAGE WELLFIELD	NY	F	88/4	88/4			/ /	/ /
	GEMS LANDFILL	NJ	S	88/4	88/4			/ /	/ /
	GLEN RIDGE RADIUM SITE	NJ	F	88/2	88/2			/ /	/ /
	HAVILAND COMPLEX	NY	F	88/4	88/4			/ /	/ /
	HELEN KRAMER LANDFILL	NJ	F	88/4	88/4			/ /	/ /
	KATONAH MUNICIPAL WELL	NY	F	88/4	88/4			/ /	/ /
	KENTUCKY AVENUE WELL FIELD	NY	S	88/3	88/3			/ /	/ /
	LANG PROPERTY	NJ	F	88/3	88/2			/ /	/ /
	LONE PINE LANDFILL	NJ	F	88/4	88/4			/ /	/ /
	METALTEC/AEROSYSTEMS	NJ	F	88/3				/ /	/ /
	MONTCLAIR/W.ORANGE RADIUM	NJ	F	88/2	88/2			/ /	/ /
	SINCLAIR REFINERY	NY	S		88/4			/ /	/ /
	SINCLAIR REFINERY	NY	F	88/2	88/2			/ /	/ /
	TOTAL PLAN / TARGET:........................			17	17				
FIRST RA START PRP	DIAMOND ALKALI	NJ	RP	88/4	88/4			/ /	/ /

FY 1988 SUPERFUND
SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION #2

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
FIRST RA START PRP	OLEAN WELL FIELD	NY	RP	88/1	88/1			/ /	/ /
	RENORA INC.	NJ	RP	88/3	88/4			/ /	/ /
	SHOPE OIL & CHEMICAL CO.	NJ	RP	88/4	88/4			/ /	/ /
	UPJOHN FACILITY	PR	RP	88/4	88/4			/ /	/ /
TOTAL PLAN / TARGET:........................				5	5				
FIRST RA COMPLETIONS PROGRAM	BREWSTER WELL FIELD	NY	F			88/4	88/4	9/23/87	/ /
	HUDSON RIVER PCB'S	NY	S			88/4	88/4	9/28/84	/ /
	LANG PROPERTY	NJ	F			88/4	88/4	/ /	/ /
	VESTAL WATER SUPPLY 1-1	NY	F			88/4	88/4	9/30/87	/ /
TOTAL PLAN / TARGET:........................						4	4		
FIRST RA COMPLETIONS PRP	HOOKER (HYDE PARK)	NY	RP			88/4	88/4	8/15/87	/ /
	OLEAN WELL FIELD	NY	RP			88/4	88/4	/ /	/ /
TOTAL PLAN / TARGET:........................						2	2		
SUBSEQUENT RA START PROGRAM	BRIDGEPORT RENTAL & OIL SVCS	NJ	F		88/1			/ /	/ /
	BRIDGEPORT RENTAL & OIL SVCS	NJ	F	88/2	88/2			/ /	/ /
	LIPARI LANDFILL	NJ	F	88/3	88/3			/ /	/ /
	SINCLAIR REFINERY	NY	F	88/4				/ /	/ /
TOTAL PLAN / TARGET:........................				3	3				
SUBSEQUENT RA START PRP	G.E. MOREAU	NY	RP	88/2				/ /	/ /
SUBSEQUENT RA COMPLETIONS PROGRAM	BRIDGEPORT RENTAL & OIL SVCS	NJ	F			88/1	88/1	5/ 8/86	/ /
	LOVE CANAL	NY	S			88/1	88/1	9/ 3/87	/ /
	LOVE CANAL	NY	S			88/2	88/2	3/29/85	/ /

FY 1988 SUPERFUND
SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
SUBSEQUENT RA COMPLETIONS PROGRAM	LOVE CANAL	NY	S			88/2	88/2	6/26/87	/ /
	LOVE CANAL	NY	S			88/4	88/4	6/26/87	/ /
	LOVE CANAL	NY	S			88/4	88/4	2/ 9/87	/ /
	TOTAL PLAN / TARGET:......................					6	6		
SUBSEQUENT RA COMPLETION PRP	G.E. MOREAU	NY	RP			88/3	88/3	/ /	/ /
FINAL RA COMPLETIONS PRP	G.E. MOREAU	NY	RP			88/3	88/2	/ /	/ /
	HOOKER (HYDE PARK)	NY	RP			88/4		8/15/87	/ /
	TOTAL PLAN / TARGET:......................					2	1		
EXPEDITED RESPONSE ACTION PROGRAM	AMERICAN THERMOSTAT CO.	NY	F		88/1			/ /	/ /
	ROEBLING STEEL CO.	NJ	F	88/1	88/1			/ /	/ /
	TOTAL PLAN / TARGET:......................			1	2				
NPL DELETION INITIATION PROGRAM	COOPER ROAD	NJ	F	88/4	88/4			/ /	/ /
FIRST NPL REMOVAL PROGRAM	NASCOLITE	NJ	F	88/1				10/28/87	/ /
	ROEBLING STEEL	NJ	F	88/1				10/26/87	/ /
	TOTAL PLAN / TARGET:......................			2					
FIRST NPL REMOVAL PRP	RINGWOOD MINES LANDFILL	NJ	RP	88/1				/ /	/ /
FIRST NPL REMOVAL COMPLETION PROGRAM	GLEN RIDGE RADIATION	NJ	F			88/3		12/ 6/83	/ /
	MONTCLAIR/W. ORANGE RADIUM	NJ	F			88/3		12/ 6/83	/ /
	NASCOLITE	NJ	F			88/2		10/28/87	/ /
	ROEBLING STEEL	NJ	F			88/3		10/26/87	/ /
	SARNEY FARMS	NY	F			88/1		9/29/87	/ /
	TOTAL PLAN / TARGET:......................					5			

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SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
FIRST NPL REMOVAL COMPLETION PRP	MANNHEIM AVENUE DUMP	NJ	RP			88/3		12/ 7/84	/ /
	RINGWOOD MINES LANDFILL	NJ	RP			88/1		/ /	/ /
	TOTAL PLAN / TARGET:........................					2			
NPL REMOVAL RESTART PROGRAM	MYERS PROPERTY	NJ	F	88/1				10/28/87	/ /
NPL REMOVAL RESTART COMP PROGRAM	AMERICAN THERMOSTAT	NY	F			88/3		10/27/86	/ /
	CLOTHIER DISPOSAL	NY	F			88/3		10/ 7/86	/ /
	MYERS PROPERTY	NJ	F			88/3		10/28/87	/ /
	POLLUTION ABATEMENT SVCS (PAS)	NY	F			88/1		4/23/87	10/21/87
	TOTAL PLAN / TARGET:........................					4			
NPL REMOVAL RESTART COMP PRP	KIN-BUC LANDFILL	NJ	RP			88/3		9/23/83	/ /
FIRST NON-NPL REMOVAL PROGRAM	MANCHESTER	NJ		88/1				/ /	/ /
	MERRICK ROAD	NY		88/1				/ /	/ /
	NOAH'S PATH		F	88/1				/ /	/ /
	UNION ROAD	NY	F	88/1				/ /	/ /
	TOTAL PLAN / TARGET:........................			4					
FIRST NON-NPL REMOVAL PRP	JOHNSON & POWERS	NJ	RP	88/2				/ /	/ /
FIRST NON-NPL RMVL COMP. PROGRAM	ARKANSAS COMPANY	NJ	F			88/2		1/20/87	/ /
	ARMONK	NY	F			88/4		3/ 3/87	/ /
	ATLANTIC RESOURCES	NJ	F			88/3		2/ 5/87	/ /
	BOSSERT	NY	F			88/4		11/ 8/86	/ /
	FORT SOLONGA	NJ	F			88/4		6/18/87	/ /

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REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
FIRST NON-NPL RMVL COMP. PROGRAM	FRIENDSHIP DRIVE	NY	F			88/3		3/26/86	/ /
	HONEYOE FALLS	NY	F			88/3		12/ 2/85	/ /
	LINCOLN AVENUE	NY	F			88/3		7/10/87	/ /
	MANCHESTER	NJ				88/2		/ /	/ /
	MERRICK ROAD	NY				88/2		/ /	/ /
	NOAH'S PATH		F			88/2		/ /	/ /
	PINE STREET	NY	F			88/3		2/13/87	/ /
	RIDGE ROAD AT RT. 20	NY	F			88/1		5/22/87	/ /
	ROUTE 518 FRANKIN TOWNSHIP	NJ	F			88/4		3/16/87	/ /
	SIGNO/MT. VERNON	NY	F			88/1		12/ 8/86	/ /
	TUTU WELL SITE	VT	F			88/4		8/21/87	/ /
	UNION ROAD	NY	F			88/4		/ /	/ /
	TOTAL PLAN / TARGET:.......................					17			
FIRST NON-NPL RMVL COMP. PRP	STEWART AFB	NY	RP			88/3		3/ 1/87	/ /
NON-NPL RMVL RESTART COMP PRP	DUANE MARINE	NJ	RP			88/1		12/ 4/84	/ /
	QUANTA RESOURCES	NJ	RP			88/2		11/15/85	/ /
	TOTAL PLAN / TARGET:.......................					2			
NPL SITE RP SEARCHES COMPLETED PRP	A.O. POLYMER	NJ	FE			88/3	88/3	/ /	/ /
	BARCELONETA LANDFILL	PR	FE			88/1		/ /	/ /
	BREWSTER WELL FIELD	NY	FE			88/3		/ /	/ /
	BRIDGEPORT RENTAL & OIL SVCS	NJ	FE			88/2		/ /	/ /
	CALDWELL TRUCKING	NJ	FE			88/4		/ /	/ /
	CHEMICAL CONTROL	NJ	FE			88/3		/ /	/ /

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SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
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ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
NPL SITE RP SEARCHES COMPLETED PRP	CHEMSOL INC	NJ	FE			88/2		/ /	/ /
	CINNAMINSON GROUNDWATER	NJ	FE			88/2	88/2	/ /	/ /
	D'IMPERIO PROPERTY	NJ	FE			88/2		/ /	/ /
	DE REWAL CHEMICAL	NJ	FE			88/1		/ /	/ /
	DELILAH ROAD	NJ	FE			88/3	88/2	/ /	/ /
	ELLIS PROPERTY	NJ	FE			88/1		/ /	/ /
	ENDICOTT VILLAGE WELLFIELD	NY	FE			88/1		9/25/87	/ /
	EWAN PROPERTY	NJ	FE			88/2		/ /	/ /
	FAIR LAWN WELL FIELD	NJ	FE			88/3		/ /	/ /
	FLORENCE LAND RECONTOURING	NJ	FE				88/1	/ /	/ /
	GEMS LANDFILL	NJ	FE			88/4		/ /	/ /
	HELEN KRAMER LANDFILL	NJ	FE			88/2	88/1	10/15/85	/ /
	LANG PROPERTY	NJ	FE			88/2		/ /	/ /
	MAYWOOD CHEMICAL CO.	NJ	FE			88/2		/ /	/ /
	MYERS PROPERTY	NJ	FE			88/1		8/17/87	/ /
	NASCOLITE CORP.	NJ	FE			88/4		/ /	/ /
	PJP LANDFILL	NJ	FE			88/2		/ /	/ /
	PORT WASHINGTON LANDFILL	NY	FE			88/3		5/17/85	/ /
	ROCKY HILL MUNICIPAL WELL	NJ	FE			88/3		/ /	/ /
	ROEBLING STEEL CO.	NJ	FE			88/1		/ /	/ /
	SYNCON RESINS	NJ	FE			88/2	88/1	/ /	/ /
	UPPER DEERFIELD	NJ	FE			88/1		8/14/87	/ /
	WARWICK LANDFILL	NY	FE			88/2		/ /	/ /
	TOTAL PLAN / TARGET:........................					28	6		

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ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
CR PLAN COMPLETION									
	AMERICAN THERMOSTAT CO.	NY	F			88/1		2/13/86	/ /
	AMERICAN THERMOSTAT CO.	NY	F			88/1		2/13/86	/ /
	APPLIED ENVIRONMENTAL SERVICES	NY	FE			88/1		/ /	/ /
	APPLIED ENVIRONMENTAL SERVICES	NY	FE			88/1		/ /	/ /
	BARCELONETA LANDFILL	PR	RP			88/2		/ /	/ /
	BARCELONETA LANDFILL	PR	RP			88/2		/ /	/ /
	COSDEN CHEMICAL COATINGS CORP.	NJ	S			88/2		/ /	/ /
	COSDEN CHEMICAL COATINGS CORP.	NJ	S			88/2		/ /	/ /
	FORT DIX (LANDFILL)	NJ	FF			88/2		/ /	/ /
	FORT DIX (LANDFILL)	NJ	FF			88/2		/ /	/ /
	GRIFFISS AIR FORCE BASE	NY	FF			88/2		/ /	/ /
	GRIFFISS AIR FORCE BASE	NY	FF			88/2		/ /	/ /
	HOOKER (102ND STREET)	NY	RP			88/2		6/26/84	/ /
	HOOKER (102ND STREET)	NY	RP			88/2		6/26/84	/ /
	JOHNSTOWN CITY LANDFILL	NY	F			88/4		/ /	/ /
	JOHNSTOWN CITY LANDFILL	NY	F			88/4		/ /	/ /
	LIBERTY INDUSTRIAL FINISHING	NY	FE			88/2		/ /	/ /
	LIBERTY INDUSTRIAL FINISHING	NY	FE			88/2		/ /	/ /
	MALTA ROCKET FUEL AREA	NY	RP			88/2		/ /	/ /
	MALTA ROCKET FUEL AREA	NY	RP			88/2		/ /	/ /
	MANNHEIM AVENUE DUMP	NJ	RP			88/1		/ /	/ /
	MANNHEIM AVENUE DUMP	NJ	RP			88/1		/ /	/ /
	MAYWOOD CHEMICAL CO.	NJ	RP			88/2		/ /	/ /
	MAYWOOD CHEMICAL CO.	NJ	RP			88/2		/ /	/ /

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REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
CR PLAN COMPLETION									
	RCA DEL CARIBE	PR	RP			88/2		/ /	/ /
	RCA DEL CARIBE	PR	RP			88/2		/ /	/ /
	RICHARDSON HILL ROAD	NY	RP			88/2		/ /	/ /
	RICHARDSON HILL ROAD	NY	RP			88/2		/ /	/ /
	TOTAL PLAN / TARGET:........................					28			
CR PLAN IMPLEMENTATION									
	COSDEN CHEMICAL COATINGS CORP.	NJ	S	88/2				/ /	/ /
	COSDEN CHEMICAL COATINGS CORP.	NJ	S	88/2				/ /	/ /
	CURCIO SCRAP METAL, INC.	NJ	RP	88/3				/ /	/ /
	CURCIO SCRAP METAL, INC.	NJ	RP	88/3				/ /	/ /
	DIAMOND ALKALI	NJ	RP	88/2				/ /	/ /
	DIAMOND ALKALI	NJ	RP	88/2				/ /	/ /
	FORT DIX (LANDFILL)	NJ	FF	88/2				/ /	/ /
	FORT DIX (LANDFILL)	NJ	FF	88/2				/ /	/ /
	GRIFFISS AIR FORCE BASE	NY	FF	88/2				/ /	/ /
	GRIFFISS AIR FORCE BASE	NY	FF	88/2				/ /	/ /
	M & T DELISA LANDFILL	NJ	RP	88/2				/ /	/ /
	M & T DELISA LANDFILL	NJ	RP	88/2				/ /	/ /
	MALTA ROCKET FUEL AREA	NY	RP	88/2				/ /	/ /
	MALTA ROCKET FUEL AREA	NY	RP	88/2				/ /	/ /
	MANNHEIM AVENUE DUMP	NJ	RP	88/4				/ /	/ /
	MANNHEIM AVENUE DUMP	NJ	RP	88/4				/ /	/ /
	MAYWOOD CHEMICAL CO.	NJ	RP	88/1				/ /	/ /
	MAYWOOD CHEMICAL CO.	NJ	RP	88/1				/ /	/ /
	RCA DEL CARIBE	PR	RP	88/2				/ /	/ /

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SCAP/SPMS TARGET - SITE SUMMARY FOR FY 1988
REGION 02

ACTIVITY TARGETS	SITE NAME	ST	LD	PLAN START	SCAP TAR. START	PLAN COMP.	SCAP TAR. COMP.	ACTUAL START DATE	ACTUAL COMPLTN DATE
CR PLAN IMPLEMENTATION									
	RCA DEL CARIBE	PR	RP	88/2				/ /	/ /
	ROBINTECH INC/NAT'L PIPE	NY	RP	88/1				/ /	/ /
	ROBINTECH INC/NAT'L PIPE	NY	RP	88/1				/ /	/ /
	SOLVENT SAVERS	NY	FE	88/2				/ /	/ /
	SOLVENT SAVERS	NY	FE	88/2				/ /	/ /
	TOTAL PLAN / TARGET:........................			24					
REVISED CR COMPLETION									
	CHEMICAL LEAMAN TANK LINES	NJ	RP			88/2		/ /	/ /
	CIBA GEIGY CORP.	NJ	RP			88/1		/ /	/ /
	CLOTHIER DISPOSAL	NY	F			88/3		8/31/87	/ /
	FACET ENTERPRISES, INC.	NY	RP			88/4		/ /	/ /
	JUNCOS LANDFILL	PR	RP			88/4		/ /	/ /
	KIN-BUC LANDFILL	NJ	RP			88/3		/ /	/ /
	RINGWOOD MINES LANDFILL	NJ	RP			88/4		/ /	/ /
	SARNEY FARM	NY	FE			88/4		/ /	/ /
	SOUTH BRUNSWICK LANDFILL	NJ	RP			88/1		/ /	/ /
	UPJOHN FACILITY	PR	RP			88/1		/ /	/ /
	VEGA ALTA PUBLIC SUPPLY WELLS	PR	RP			88/2		/ /	/ /
	VOLNEY MUNICIPAL L/F	NY	F			88/1		8/31/87	/ /
	YORK OIL COMPANY	NY	F			88/2		/ /	/ /
	TOTAL FLAN / TARGET:........................					13			
REVISED CR IMPLEMENTATION									
	CHEMICAL LEAMAN TANK LINES	NJ	RP	88/2				/ /	/ /
	CHEMICAL LEAMAN TANK LINES	NJ	RP	88/2				/ /	/ /
	CIBA GEIGY CORP.	NJ	RP	88/1				/ /	/ /

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REVISED CR IMPLEMENTATION									
	CIBA GEIGY CORP.	NJ	RP	88/1				/ /	/ /
	GE WIRING DEVICES	PR	RP	88/3				/ /	/ /
	GE WIRING DEVICES	PR	RP	88/3				/ /	/ /
	JUNCOS LANDFILL	PR	RP	88/4				/ /	/ /
	JUNCOS LANDFILL	PR	RP	88/4				/ /	/ /
	KIN-BUC LANDFILL	NJ	RP	88/2				/ /	/ /
	KIN-BUC LANDFILL	NJ	RP	88/2				/ /	/ /
	LUDLOW SAND & GRAVEL	NY	RP	88/3				/ /	/ /
	LUDLOW SAND & GRAVEL	NY	RP	88/3				/ /	/ /
	RINGWOOD MINES LANDFILL	NJ	RP	88/3				/ /	/ /
	RINGWOOD MINES LANDFILL	NJ	RP	88/3				/ /	/ /
	SARNEY FARM	NY	FE	88/2				/ /	/ /
	SARNEY FARM	NY	FE	88/2				/ /	/ /
	UPJOHN FACILITY	PR	RP	88/3				/ /	/ /
	UPJOHN FACILITY	PR	RP	88/3				/ /	/ /
	TOTAL PLAN / TARGET:.......................			18					
S106-REFERRALS ENFORCEMENT	CALDWELL TRUCKING	NJ	FE	88/4	88/4			/ /	/ /
	CINNAMINSON GROUNDWATER	NJ	FE	88/3	88/3			/ /	/ /
	COMBE FILL SOUTH LANDFILL	NJ	FE	88/2	88/2			/ /	/ /
	DELILAH ROAD	NJ	FE	88/4	88/4			/ /	/ /
	TOTAL PLAN / TARGET:.......................			4	4				
S107 COST RECOVERY REFERRALS ENFORCEMENT	BREWSTER WELL FIELD	NY	FE	88/4	88/4			/ /	/ /
	DIAMOND ALKALI	NJ	FE	88/2	88/2			/ /	/ /

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8107 COST RECOVERY REFERRALS ENFORCEMENT	GEMS LANDFILL	NJ	FE	88/4	88/3			/ /	/ /
	KATONAH MUNICIPAL WELL	NY	FE	88/2	88/2			/ /	/ /
	MARATHON BATTERY CORP	NY	FE	88/2	88/2			/ /	/ /
	METALTEC/AEROSYSTEMS	NJ	FE	88/3	88/3			/ /	/ /
	WIDE BEACH DEVELOPMENT	NY	FE	88/3	88/3			/ /	/ /
	WILLIAMS PROPERTY	NJ	FE	88/4	88/4			/ /	/ /
	TOTAL PLAN / TARGET:........................			8	8				
8107 JUDICIAL CASE RESOLUTIONS ENFORCEMENT	AMERICAN THERMOSTAT CO.	NY	FE			88/4	88/4	/ /	/ /
	GOOSE FARM	NJ	FE			88/1	88/1	/ /	/ /
	KIN-BUC LANDFILL	NJ	FE			88/2	88/2	/ /	/ /
	MEK HICKSVILLE	NY	FE			88/4	88/4	/ /	/ /
	OLEAN WELL FIELD	NY	FE			88/3	88/3	9/30/86	/ /
	PIJAK FARM	NJ	FE			88/1	88/1	/ /	/ /
	POLLUTION ABATEMENT (PAS)	NY	FE			88/4	88/4	12/31/85	/ /
	RENORA INC.	NJ	FE			88/2	88/2	9/30/85	/ /
	SPENCE FARM	NJ	FE			88/1	88/1	/ /	/ /
	TOTAL PLAN / TARGET:........................					9	9		
ADMIN SETTLEMENTS/CASE RESOLUT ENFORCEMENT	BOSSERT MFG	NY	FE			88/3	88/3	/ /	/ /
	CALDWELL TRUCKING	NJ	FE			88/1	88/1	/ /	/ /
	D'IMPERIO PROPERTY	NJ	FE			88/2	88/2	/ /	/ /
	G.E. MOREAU	NY	FE			88/2	88/2	/ /	/ /
	GE WIRING DEVICES	PR	FE			88/4	88/2	/ /	/ /
	TOWN OF POMPEY	NY	FE			88/1	88/1	/ /	/ /

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ADMIN SETTLEMENTS/CASE RESOLUT ENFORCEMENT	WALLKILL WELL	NY	FE			88/1	88/1	/ /	/ /
	TBD - NPL SCAP ACTIVITIES		FE			88/4	88/4	/ /	/ /
	TOTAL PLAN / TARGET:......................					8	8		
FIRST RI/FS STARTS - FED FAC FEDERAL FACILITIES	NAVAL AIR ENGINEERING CENTER	NJ	FF	88/1	88/1			/ /	/ /
	NAVAL WEAPONS STATION	NJ	FF	88/4	88/4			/ /	/ /
	TOTAL PLAN / TARGET:......................			2	2				
FIRST RI/FS COMPLETION/FED FAC FEDERAL FACILITY	FORT DIX (LANDFILL)	NJ	FF			88/3	88/3	/ /	/ /
FIRST RD STARTS/FEDERAL FACILI FEDERAL FACILITY	FORT DIX (LANDFILL)	NJ	FF	88/2	88/2			/ /	/ /
FIRST RD COMPLETIONS/FED FAC FEDERAL FACILITY	FORT DIX (LANDFILL)	NJ	F8			88/3	88/3	/ /	/ /
FIRST RA START/FED FAC FEDERAL FACILITY	FORT DIX (LANDFILL)	NJ	FF	88/4	88/4			/ /	/ /
RD/RA NEGOT. COMPL. CANDIDATES ENFORCEMENT	BEACHWOOD/BERKLEY WELLS	NJ	FE			88/4	88/4	/ /	/ /
	CHEMICAL CONTROL	NJ	FE			88/2	88/2	/ /	/ /
	CHEMICAL LEAMAN TANK LINES	NJ	FE			88/4	88/4	/ /	/ /
	CIBA GEIGY CORP.	NJ	FE			88/3	88/2	/ /	/ /
	CINNAMINSON GROUNDWATER	NJ	FE			88/4	88/4	/ /	/ /
	CLOTHIER DISPOSAL	NY	FE			88/4	88/2	/ /	/ /
	DELILAH ROAD	NJ	FE			88/4	88/4	/ /	/ /
	DIAMOND ALKALI	NJ	FE			88/2	88/2	/ /	/ /
	ELLIS PROPERTY	NJ	FE			88/4	88/4	/ /	/ /
	ENDICOTT VILLAGE WELLFIELD	NY	FE			88/3	88/1	/ /	/ /
	FULTON TERMINALS	NY	FE			88/3	88/2	/ /	/ /

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RD/RA NEGOT. COMPL. CANDIDATES ENFORCEMENT	GEMS LANDFILL	NJ	FE			88/4	88/4	8/15/85	/ /
	GLEN RIDGE RADIUM SITE	NJ	FE			88/3	88/3	/ /	/ /
	GOOSE FARM	NJ	FE			88/1	88/1	2/15/86	/ /
	HAVILAND COMPLEX	NY	FE			88/2	88/2	/ /	/ /
	JUNCOS LANDFILL	PR	FE			89/3	88/4	/ /	/ /
	KIN-BUC LANDFILL	NJ	FE			88/3	88/4	/ /	/ /
	MONTCLAIR/W.ORANGE RADIUM	NJ	FE			88/3	88/3	/ /	/ /
	MONTCLAIR/W.ORANGE RADIUM	NJ	FE			88/3	88/3	/ /	/ /
	MONTGOMERY TOWNSHIP HOUSING	NJ	FE			88/2	88/2	/ /	/ /
	NASCOLITE CORP.	NJ	FE			89/2	88/1	/ /	/ /
	POMONA OAKS WELLS	NJ	FE			88/4	88/4	/ /	/ /
	REICH FARMS	NJ	FE			88/4	88/4	/ /	/ /
	RENORA INC.	NJ	FE			88/1	88/1	/ /	/ /
	RINGWOOD MINES LANDFILL	NJ	FE			88/4	88/4	/ /	/ /
	SUFFERN VILLAGE WELL FIELD	NY	FE			88/1	88/1	/ /	/ /
	SYNCON RESINS	NJ	FE			89/1	88/4	/ /	/ /
	TABERNACLE DRUM DUMP	NJ	FE			88/3	88/3	/ /	/ /
	UPJOHN FACILITY	PR	FE			88/3	88/3	/ /	/ /
	VEGA ALTA PUBLIC SUPPLY WELLS	PR	FE			88/2	88/2	/ /	/ /
	VESTAL WATER SUPPLY 1-1	NY	FE			88/2	88/1	/ /	/ /
	VESTAL WATER SUPPLY 1-1	NY	FE			88/2	88/2	/ /	/ /
	VOLNEY MUNICIPAL L/F	NY	FE			88/2	88/2	/ /	/ /
	WALDICK AEROSPACE DEVICES	NJ	FE			88/1	88/1	/ /	/ /
	WILLIAMS PROPERTY	NJ	FE			88/1	88/1	/ /	/ /

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RD/RA NEGOT. COMPL. CANDIDATES									
ENFORCEMENT	YORK OIL COMPANY	NY	FE			88/3	88/3	/ /	/ /
	TOTAL PLAN / TARGET:........................					33	36		

Senator **Lautenberg**. Chris, in our April field hearing we discussed the directive that you had sent to New Jersey about speeding up their RI/FS procurement process. What's happened since then? Have you been working with the State to try to reduce or eliminate that 6-month delay in the State system? Have we solved the problem?

Mr. **Daggett**. Yes, we have worked with the State on that issue. We gave tried to identify methods to expedite the State contractor procurement process. Managers have been meeting monthly to address site-specific as well as administrative issues. The Department of Environmental Protection has developed a system of term contracts for lab services, well drilling, and other routine tasks that ought to speed contractor procurement, but I have to say the State is only now in the process of awarding design contracts for records of decisions that I signed in September 1986.

We have not been able to break through some of the procurement problems in that State process. I think, frankly, it goes beyond the Department of Environmental Protection and it goes into some of the way the State functions and the way it operates in general in its contracting procedures. We continue to try to press this, but I don't come to you today feeling comfortable that we've done nearly as well as we might. It's maybe going to involve some fundamental changes in the State that we're going to have to address.

Senator **Lautenberg**. For any of you—Dr. Porter or others—can we get the regions to further streamline the RI/FS by expanding site investigations? Can we develop generic feasibility studies?

Dr. **Porter**. Mr. Chairman, Henry Longest will address that. We are trying to be sure that RI/FS are done in a fairly common manner and that they aim for the 18 month timeframe I talked about. But, Henry, why don't you comment a little bit on the expanding site inspection program?

Mr. **Longest**. The key thing here is as we go through the preliminary stages looking at the PA we refer to, the preliminary assessment, and the SI site investigation, in the past we have not gotten enough data in the site investigation phase to move immediately into the study. What we're trying to do is when we find a site that we feel pretty confident that it is a site that's going to rank on the National Priority List, we want to get more data when we are in the PASI stage so we can not only move more quickly to the ranking, but also so that we'll have data to move into some judgments as we move into the study phase and move more quickly to the design.

Senator **Lautenberg**. I would hope that we can refine that process and just try to get these things off the dime.

Can we begin, Dr. Porter, actual construction of cleanup plans earlier by—you heard this discussion—integrating clean-up activity in the earlier phases?

Dr. **Porter**. Yes, Mr. Chairman, we're working to see if we can use removal authority where we see an obvious problem at a site. Whether removal authority or some other authority is used we should go ahead and move into some work. There is tension because the community, of course, wants to know what we are doing, and wants to be able to interact on it. We can't get too far ahead on what is going to be the permanent remedy, but we are trying to move quickly on obvious problems while we are conducting our studies, and while we're coming up with the overall solution.

As I said earlier, we're also trying to use removals in a greater manner in that way, too.

Senator LAUTENBERG. Mr. Lucero, I wanted to ask you about the development of generic feasibility studies. Do you think that we can get that underway, get a program such that, we're not looking for starting from scratch every time we have to move into one of these?

Mr. LUCERO. Senator, one of the things that we have been looking at has come to our attention because we have had sites where potentially responsible parties have repeated in different parts of the country and they have the same kind of problem. It has recently come to our attention that they have already done the studies on the same kind of site in another region, in another State perhaps. Clearly, in that type of situation we have the information. We may be able to proceed. It may need to be tailored for the new site, but we ought to be able to move more quickly.

In addition, there are certain kinds of activities which the agency has already developed some generic standards on, such as simple surface cleanup work, removal or draining of pit ponds and lagoons. I think we, as an aspect of improving on the RI/FS process, probably could put some more effort into that and find yet still other things that would promote the process.

Senator LAUTENBERG. I would hope so.

One of the questions, of course, is the quality and the availability of the work force, availability of the personnel. Dr. Porter, you decide if you want someone else to answer. What can we possibly do about increasing the longevity of the individuals' work arrangement?

Dr. PORTER. We can try.

Senator LAUTENBERG. What is there? Is that being worked on? I recognize that opportunity is always knocking for people with skills, but the fact of the matter is that we have a job to get done that does require experience built over a period of time. If we keep making better opportunities for people and losing them, then we're essentially working against ourselves. I don't want to inhibit anybody's opportunity, but we do have to have some kind of an understanding that people who come onboard, who have a skills base that they bring with them or one that we're going to give them, have to be there 3 years, 5 years, some period of time that we can rely on.

Dr. PORTER. Yes. Senator Lautenberg, that's a very good point. At somewhat your instigation, we've looked very hard at that. We have a whole series of courses at EPA on Superfund and other matters. We've been thinking about how to develop a more formal, advanced training program. We think there might be some possibility—and have to speak carefully because I'm not sure if we can do all of this—in return for some advanced training for a certification program, the person would then commit to some period of time with the Federal Government. There are models for similar programs in the Government. It's not easy to do however. We don't want to inhibit people from entering the workforce by committing to sign a 5-year contract, similar to joining the Navy for example. They may not be quite as motivated to work for the program if they think they don't have mobility. There is a tension between people wanting to be hired have some mobility and people that we've trained, spent a lot of time, effort and money on to train, who have become very valuable to us, concerning their tenure.

I think the idea of an institute that you mentioned in your opening statement has merit. The development of a number of certification programs, would mean entail formalizing to some extent what is already in place. We could weave these ideas into a program where Federal employees, in return for a certificate or program, could for example, become a project manager at a Superfund site, and ultimately commit to a longer tenure.

Mr. DAGGETT. I would like to comment on that, if I might, Senator, also. It's a complex question about how you get trained people on and keep them on, as you well know. First of all, there's a lot of pressure on people, once they're in and they get some training under their belt, to go somewhere else because there's a lot of contractors that need assistance. Take the New York Region right now; we're third in line in terms of the salary structure we can offer people. The State now offers much better salaries than the Federal Government. The contractors do too. You have to take that into account. You have to take the cost of living into account in the New York City area and working in the Federal Government. There are a number of factors that come into play.

The amount of time that people spend on these sites—our staff spends hundreds of hours on these sites. It's not a 40-hour work week like a lot of people would like to think that Government employees are involved in. We have people committing enormous amounts of time by the time they add up all the public sessions they attend in the evenings, and after a while when you start to look at some of the options, of going to a contractor who offers you a better situation than that, the pull is hard to resist. So we end up constantly fighting that battle of how do you keep staff. Then once you have them onboard, then you've got the whole question of training. That's a separate issue in my mind from retention, and both of them are very important.

Senator LAUTENBERG. Right. I come with some corporate experience in a fairly large organization. The one thing that I found, and I have found since I have been here in Government, that we do get exceptional performance from lots of people committed to Government service.

Mr. DAGGETT. It's true.

Senator LAUTENBERG. I'm aware that we have people who work in the system, often much harder than the private sector would demand, often in lesser conditions—including wages, including recognition of transfer costs, and so on.

By the way, the transfer cost problem is Government-wide, whether it's with the law enforcement agencies, whether it's someone who moves from a more rural State to a more metropolitan area and the costs go up immediately. But we have a job to do, nevertheless, and I've found that a lot of people will come to Government searching for experience, trying to undergo the kind of relationship that they've heard from other people that says when you're in Government there is a unique and different feeling about the job that you have; that you're not there simply because of a salary or something like that. You're there because you really believe in the tasks that you're taking on. A lot of people do that. They do it in universities; they do it in research facilities. Many times people could do far better remuneratively in other situations.

But I think if it's clearly understood when people are hired that this is intended to be—the understanding is that unless there is a poor performance or the job doesn't meet the expectation, that you expect people to spend 3 to 5 years with you. I think if that point is clearly made, you've got a much better chance.

Reminders ought to be going out, and you do have a very sensitive personnel job. Yours is one of the departments in Government that has among the highest turnover. Why? Because you have so many skilled people and there are so many opportunities outside. We're creating a lot of the opportunities by developing a field in which there are new entrants and a shortage of skilled people. Therefore, you've got to invest a more effort and ingenuity. Maybe the training ought to be cyclical or periodic so that employees know that unless they've spent 3 years, they will not have received the full range of training skills that are available. Certainly the problem deserves a lot of effort and a lot of thought.

In terms of oversight, training and contracts, site oversight, couldn't we beef up the oversight of the contracting process and work at sites by including the contracts management and projects management courses at the training institutes? That's a very demanding assignment if you're going to do it properly.

Dr. PORTER. Senator, we're doing that and we think we're more formal about it. We have programs in contract management that are going to be particularly important as we get the ARC's contracts out to the regions. Some of the regions are nervous about this because they will have not only the benefit of having the contractors near at hand, but the obligation to manage them well. So we're going to have to train a lot of people, with Mr. Kinghorn's help and others——

Senator LAUTENBERG. Can that be taken over by Washington?

Dr. PORTER. We do some of both, and it's a tradeoff. We have some national contracts in the RCRA and Superfund programs that we administer from Washington, but I think that it's going to make sense over time to get project managers to administer contracts in the regions so that they have accountability to the region.

One of the problems that was mentioned earlier is that if somebody is doing 50 projects and as a national matter they're doing good because they're doing well in, say, 46 of the 50, I don't think that's good enough. I think we want site-specific performance.

When you run everything out of Washington you get an averaging effect, whereas if the region says: I've got 10 projects; all 10 are to be done well. I want to hold the award fee structure accountable at that level because I think it results in a better situation for getting a higher standard of performance, rather than averaging it across the country.

Mr. DAGGETT. From my perspective, I welcome that kind of opportunity to hold people accountable. It would be terrific.

Senator LAUTENBERG. Do we call on the various regions to trade off useful skills and knowledge? Again, no matter how you try to explain it away, that one region runs into more complex issues, et cetera, believe me, when you see a good performance—and there are ways to measure it—in one area, you have to say it has to do more with the management than it does with the environment.

Mr. KINGHORN. Mr. Chairman, if I may try to answer that — I think on the question of retention, which I've testified on before, and I would agree with you that I think the key question here is retention. I think we can get the people into the Agency.

The first question on training I think is opportunity. We all agree here that we should look at some idea of either expansion of our current in-house Institute or some kind of program that perhaps might in a smaller way mirror the Navy controllership program. That would over time develop more career understanding by the people that we bring in at the GS-9 to GS-11 level.

We do a lot of training. We testified on that before. The Superfund program just recently let a contract worth about $13 million over a number of years that will do a lot of training—everything from management training, to site training, to help train the new people and some of the people who have been here a while on how to negotiate with a private party; a lot of those skills.

I think what we're beginning to come to, at least in my mind, is perhaps the need not to centralize the training, but to give it a little bit of centralized focus. We are beginning to understand, if you look at the quit rate, for instance, that you brought up at the last hearing, it is a very mixed rate. Some regions are below the national average; some regions are astronomically high. It's higher at the 13 level than the 11 level.

I think the thing I would like to explore, and perhaps with the committee's help, is a look at what kind of little more structured approach we can take to what you might call career management, because we're never going to be able to pay these people enough. That's not going to be the key.

Senator LAUTENBERG. There's also the analogy you used with the Navy school. The fact of the matter is that when we recruit for the services, more often than not you will see a picture of the technology that an individual might be working with suggesting an enhancement of one's career opportunity. Well, the same thing ought to be done here because I hope that the Superfund will have proven that it's worth getting rid of these sites throughout the country and that there will be an enormous business opportunity there, enormous career opportunities.

If we can bring people in and persuade them that they're going to be far better off over their career lifetime by sticking with it and getting training, then we have to have the right kind of training. That's the thing that I implore you to think about——

Dr. PORTER. Senator, may I make one quick point on this subject as well as your other point, which is the lack of uniform quality throughout the regions? I think those tie together to some extent.

We're trying to find the best trainers, who are people who have done a good job in their region. If a region is doing a particularly good job on some aspect of the program we are trying to get them to train people in other regions to interact more.

Senator LAUTENBERG. Then you have to centralize it because what happens you're saying to the person who is the administrator in a given region who does a good job, "Now we're going to burden you further. We're going to lay on more hours." That doesn't seem to make sense. That's why as much as possible I think we ought to try to centralize the training. The operations side of the thing I think absolutely belongs in the field. I think you are in a unique position, an unfortunate one, that says you have to constantly bolster morale and remind people of opportunity.

Mr. KINGHORN. Mr. Chairman, you also just hit, I think, on the second point——

Senator LAUTENBERG. If I keep this up, I'm going to apply for a job down there.

Mr. KINGHORN. Mr. Chairman, on the second point you just mentioned—the first was opportunity; people have to have the opportunity. The second basically is to think as an Agency. Lee Thomas happened to bring this up yesterday in our national awards ceremony—that not only do you have to have an opportunity, but you have to build into the fabric of the agency that it is just as important to get yourself trained or train your compatriots as it is to get a bean at the end of the year. I think that is an element that we have to deal with, and we are struggling to deal with that.

Senator LAUTENBERG. I want to ask you about the budget management side things. Can we improve on deadline management in cleanup programs? That includes getting the regions to use tougher benchmarks for cleanup work and enhancing the use of incentives or punishment for cleanup contractors to get the work done on time, and budgeting only those resources reasonably necessary to achieve these deadlines. It means really targeting a goal, a deadline, that we'd like to meet.

Dr. PORTER. Mr. Chairman, I think we can. One of the subjects we talked about earlier, to give you an example is our RI/FS's—that is, the feasibility study phase. We should give a region a certain amount of money to do a certain number of RI/FS's and they, should have to come in within that budget.

I think historically in the program, for example, studies have tended to overrun their budget. That's going to bite us someday if we're not careful because we're going to need money for constructions, designs, and so forth. I don't mean, by any means, to put all the blame on the region. There's plenty of blame to go around.

I think we have had a situation where some parts of the program have been somewhat unconstrained, and I think that we need to lay out a budget for these exercises. Whether we develop a time budget or a money budget—not that you can never exceed the limits on either—it is important that people realize the limits that are set. It should not be easy to get more money. It may not be impossible, but it should not be easy. I think to date, frankly, it's been a little too easy.

Senator LAUTENBERG. The sense of urgency and the supervision, all these things have to be embodied in a certain set of principles by which you operate. The more we can do that, the better off we're going to be.

How about the ROD distribution? How's EPA going to level out the decisionmaking process so that we're not all bunched up, as we discussed earlier?

Dr. **Porter**. Mr. Chairman, as I mentioned in my opening remarks, we're going to do about 30 RODs this quarter. As I said, I've been on the phone personally with the regional administrators to be sure we meet those deadlines. It looks like we will in most cases.

I'm very concerned about it. Again, I don't mean to offer excuses, but I think that the first year has been a little bit unusual. However, on the other hand, I would say that's been the history of the program—much of the work done in the fourth quarter.

This year, for example, one impetus we have is that if we don't get a ROD done by the second quarter, it will not get into the system to meet the 175 remedial action starts required by law. So we have an extra stick this year where we're telling people that the first and second quarter is particularly important because if we don't get those decisions made, we can't start design engineering and be in to the construction phase in time to have 175 RA starts.

But we're working very hard on trying to smooth that out from Lee Thomas, and myself on down, to emphasize that it is not acceptable for us and for everybody to bunch RODs in the third and fourth quarters. I think we explained it to the Regions to some extent last year, but I'm as worried as you are about people in a crisis mode in a few weeks trying to whistle through a lot of tough decisions.

I made a couple of ROD decisions myself this year. I know how tough they are. I think people need time to reflect on those ROD decision's and receiver community input, and they should not decide in a crisis mentality.

This year we seem to have a much smoother flow of RODs. I'll be able to tell you more in a couple of weeks how many we did the first quarter. That will give you some sense——

Senator **Lautenberg**. Is it the same logic that you would have applied, let's say, during the past year?

Dr. **Porter**. No. Last year I initiated the proactive memo process where I define, when the quarter begins what should be accomplished that quarter. That's worked now for two quarters, and it's worked very well. Prior to that, the process was not in place. We were very busy with policy issues——

Senator **Lautenberg**. Why?

Dr. **Porter**. We were very busy with policy issues, and I think people just slipped. Activities were scheduled last year in a reasonably uniform manner. However, for a variety of reasons—maybe it was lack of policy on my part—people didn't make some of those calls. I think this year, we have the money flowing smoothly; we have most of the policy issues in place; and we have a process of tracking them from the regional administrator on down in terms of what has to be done, by project and by name. We're not dealing with just numbers. These are the decisions to be made this quarter.

I'm moderately optimistic. I'll be happy to share that with you in a few weeks on how we came out the first quarter.

Senator **Lautenberg**. Why don't you report to us where you are in a few weeks.

Dr. **Porter**. Sure.

Senator **Lautenberg**. Give us where you've been for the past quarter.

[Material referred to follows:]

Attachment

First Quarter Enforcement Accomplishments

RODs Signed: 4 (3 1st + 1 Subs.)

Section 107 Referrals: 5 (> $200K)

RD Starts: 5 (2 1st + 3 Subs.)

RA Starts: 0

****

FIRST QUARTER FY 1988
ACCOMPLISHMENTS
AS OF 2/02/88

****

	REGIONS										NATIONAL TOTAL
	1	2	3	4	5	6	7	8	9	10	
Preliminary Assesments											
TARGET	60	180	200	69	290	50	69	49	309	21	1297
ACCOMPLISHMENT	89	156	387	133	462	201	121	79	371	30	2029
Site Inspections											
TARGET	5	0	5	40	30	20	5	10	0	9	124
ACCOMPLISHMENT	16	0	17	43	82	24	23	11	3	24	243
FUND FINANCED* NPL Sites with Removal Starts											
ACCOMPLISHMENT	0	3	3	3	2	0	1	0	0	0	12
FUND FINANCED* NPL Sites with Removal Completions											
ACCOMPLISHMENT	0	1	0	3	3	0	2	0	0	0	9
FUND FINANCED* Non-NPL Sites with Removal Starts											
ACCOMPLISHMENT	2	1	6	8	5	1	5	1	1	0	30
FUND FINANCED* Non-NPL Sites with Removal Completions											
ACCOMPLISHMENT	4	2	8	13	6	3	2	2	4	0	44
First Fund Financed RI/FS Start											
TARGET	0	0	0	0	0	1	0	0	1	0	2
ACCOMPLISHMENT	0	0	0	1	0	1	1	0	0	0	3
Subsequent Fund Financed RI/FS Start											
TARGET	0	0	0	0	0	0	1	4	0	0	5
ACCOMPLISHMENT	1	1	1	0	0	0	0	2	0	0	5

*Removals do not have quarterly targets.

	REGIONS										NATIONAL TOTAL
	1	2	3	4	5	6	7	8	9	10	
First Fund Financed RI/FS Completion											
TARGET	0	4	0	0	4	0	1	0	2	1	12
ACCOMPLISHMENT	0	0	0	1	1	0	1	0	0	1	4
Subsequent Fund Financed RI/FS Completion											
TARGET	0	1	0	0	1	0	0	2	0	0	4
ACCOMPLISHMENT	0	1	0	0	0	0	0	0	1	0	2
First Fund Financed RD Starts											
TARGET	0	4	1	2	6	0	1	2	1	0	17
ACCOMPLISHMENT	0	0	0	2	0	0	0	0	0	0	2
Subsequent Fund Financed RD Starts											
TARGET	0	3	0	1	1	1	3	5	0	0	14
ACCOMPLISHMENT	0	1	0	0	0	1	0	4	0	0	6
First Fund Financed RA Starts											
TARGET	1	0	0	2	0	3	0	0	1	0	7
ACCOMPLISHMENT	1	0	0	1	0	3	0	0	0	0	5
Subsequent Fund Financed RA Starts											
TARGET	0	1	0	0	0	0	0	0	0	0	1
ACCOMPLISHMENT	0	0	0	0	0	0	0	0	0	0	0
Final Fund Financed RA Completions											
TARGET	0	0	1	0	0	1	0	0	0	0	2
ACCOMPLISHMENT	0	0	1	0	0	1	0	0	0	0	2
Initiation of NPL Deletion Process											
TARGET	0	0	0	7	0	0	0	0	0	0	7
ACCOMPLISHMENT	0	0	0	2	0	0	0	0	0	0	2

Senator Lautenberg. It looks like obviously there's a long learning cycle. It's too bad because I, frankly, thought—and I'm sure many of you will agree—that the first 6 years of the program, starting in 1980 when the Superfund was first put on the books, that a lot of this would have been understood; that it would have been apparent that the program was moving slowly. We know that we had unusual problems during that period of time, but there should have been a substantial learning experience.

I thought we were, frankly, going to hit the deck, to use the expression, really at a fast pace.

Dr. Porter. Yes. Senator Lautenberg, I don't mean to apologize for last year because I think we had a fairly good year. I do think there was bunching in the fourth quarter problem that I was disappointed in, but let me make one other point.

People who were making records of decision last year received fairly late in the year the initial guidance on how to select remedies. There was a lot of debate, as you know, on this issues of how to select remedies under the new law. The issues are still contentious—how to think about permanent, remedies how to think about treatment, and how to think about cost effectiveness. There was a bit of a bunching just due to trying to get some consensus within the agency on how to think about those decisions.

Mr. Daggett. Let me add, too, Senator, we in Region II bunched a number of decisions toward the end of the last fiscal year. But let me say that I don't feel for a moment that we operated in a crisis mode to accomplish that, as was implied here earlier by several others who testified—I don't think that we cut corners on public participation in any fashion.

Senator Lautenberg. Do you think the public was involved early enough, Chris?

Mr. Daggett. The public is involved as required by law throughout the process, and we're constantly striving to improve that, to involve them as early in the process as possible and as completely too.

Senator Lautenberg. Are we standing on technicalities or are we looking at real involvement.

Mr. Daggett. I'm talking about meaningful public involvement, and I haven't hesitated for a minute to let a ROD slip into another fiscal year if I felt that public participation wasn't adequate, and I've done that, much to the chagrin, I'm sure, of Dr. Porter and others because we've missed some of the numbers, and that's true.

But I would stand by the public participation process we used and I'd stand by the decisions that we made.

Senator Lautenberg. I think your region is unique.

Mr. Daggett. I'm not so sure.

Senator Lautenberg. Again, that bunching of RODs, Chris, has not been a good way to manage.

Mr. Daggett. No, and I concur completely with what Dr. Porter said about the need to spread it out, and that's what we're doing. We're continuing to work on that, but I just didn't want to let go of the fact that last year—and Win just underscored that, I think, by saying that we feel that we did well last year and we defend those decisions.

Senator LAUTENBERG. Mr. Marzulla, we haven't had a chance to hear from you. Do you see an opportunity or a need to bring more cost recovery and other enforcement actions into play here?

Mr. MARZULLA. Indeed, Senator. The enforcement prong of the clean-up program is essential I think to its ultimate success. As I think was testified to earlier by Mr. Moorman, the fact is that it is necessary that private parties do a large portion of this cleanup. To that end, I think we have brought a goodly number of enforcement cases, and we are prepared to bring more.

Senator LAUTENBERG. Have we brought enough based on the circumstances that tell us what's available? Have we been vigorous enough, Mr. Marzulla, in pursuing these opportunities?

Mr. MARZULLA. First of all, let me say in that in a sense, Senator, we are at the end of the pipeline that Dr. Porter described. The cases that we are able to bring are those which are referred to us by the Environmental Protection Agency.

We, therefore, are dependent upon what is in the pipeline in order to have the enforcement deterrence and in order to recover the costs that have previously been expended. So the answer is that certainly we are prepared to take on additional cases as they come down the pipeline, and we are prepared to prosecute them vigorously.

Senator LAUTENBERG. Mr. Lucero, how do you view that?

Mr. LUCERO. Well, being on the upper end of the line that Mr. Marzulla was talking about, I would make a couple of observations. I think we've managed to keep a good amount of activity going on, but I, for one, and I know Dr. Porter agrees with this, will tell you that we can do more. In particular, we have to pay some attention, as others who testified were encouraging us to do, about generating more 106 actions which are the injunctive relief activities of the Government.

We are at the point where we have a tremendous number of new tools in the law that Congress reauthorized, including some very favorable statutory provisions governing review on the record and the favorable standard of review. It's very clear that the standard of liability has been established by case law and affirmed again by the Congress, and we're in a position where what was once a difficult set of cases should be much easier. We realize, as many have said, because we also say it, that we have to be willing to show that we will take enforcement action.

We've targeted about twenty 106 cases this year. I, for one, would like to see if we could improve on that. In addition to that, we've also talked about using more 106 orders for particular targeting at sites where some parties have settled and others haven't.

We have at least two situations we could see using them more effectively. One is where we haven't yet finalized the agreement and we could issue orders to parties who haven't settled. That has the incentive of bringing some people into the settlement. That has worked in at least one site.

The other situation that Region II, for example, has utilized is where you have recalcitrants, isolate parts of the site or parts of the work to be done and direct that they be done under those orders. Obviously if they're not complied with, then we have the ability for a potential treble damages case, and it enforces that or it strengthens that enforcement arm because we believe that without that strong enforcement piece the agency settlement efforts will not be as successful as they could be.

Senator LAUTENBERG. Therefore, we come away with a conclusion that we ought to bring more of these actions, more of these enforcement actions than we have and push that, frankly, to the limit of our capacity to manage these things. First of all, there's a treasure chest out there in terms of recovery, but, second, to move the program along.

Mr. LUCERO. We agree with you, Senator.

Senator LAUTENBERG. OK. Dr. Porter, does EPA get more efficient or less so when it involves citizens at the earliest possible time? Is there a reluctance in the agency to get the community involved in decisions at an early stage?

Dr. PORTER. Senator, as you know, there are a variety of people in the Agency. Some have a variety of views. I think it is both efficient and wise to get people involved fairly early. It forces us to whittle down the alternatives in a reasonable manner. In these committee public hearings that I've been to—and I've been to many of them—there frequently are many good suggestions. They may not be discussed in technical terms, but these are the people who live near the site. I certainly encourage early participation by all citizens involved.

Certainly it's time consuming. I think you'll hear that from the regions—that it is time consuming, et cetera, but we are doing it. We are doing the best we can and we probably need to do more. I think it's part of the whittling-down process.

At every site there may be have a dozen or 15 potential options for cleanup, and you need, through some process of technical and community input and other factors, to narrow the options down to an amount you can deal with. Really one of the nine criteria I mentioned earlier is community acceptance. It's a very, very important component. We're not necessarily going to take a vote at each site, but I'm certainly interested in knowing what the comunity think of between the surviving alternatives.

Senator LAUTENBERG. Then why has it taken so long to get the regulations out there for technical assistance? I've got a provision in the 1988 appropriations bill that demands that the Technical Assistance Grants program be made operational.

Dr. PORTER. We're almost there. I know it's been an issue of yours, Mr. Chairman. As I think I indicated a couple of months ago, we were directed by law to do a rule. We're doing the rule much faster than the normal process in EPA. It will be out, I think, in the January-February timeframe. We're going to have the rule out. It will up for grabs. In only a month or two from now it will be ready.

We had a great deal of comment on that rule. We've pushed and pushed and pushed on that rule. Henry Longest knows about that. I've pushed him; he's pushed his staff. We had a lot of comment on that rule. There have been a lot of issues raised, but we've tried to work through those and write a good, interim, final rule to start the process. We're within a month or two of being there.

Senator LAUTENBERG. It's been interminable.

Dr. PORTER. Well, the whole rule process is interminable at EPA, frankly, but, you know, we are directed to listen to people. I get a thousand comments on many of these rules. I received 5,000 comments on the underground storage tank rule. We received a lot of comments on the TAG rule. People would like for us to get it out, but they'd like for us to get it out on their terms.

Senator LAUTENBERG. You know that we want it out in a manner that gets the assistance to the individuals affected by Superfund sites.

Dr. PORTER. I understand.

Senator LAUTENBERG. They can't hire the experts. A lot of them become experts on their own. I'll tell you, they're very impressive.

Dr. PORTER. They are.

Senator LAUTENBERG. Many start off without any formal knowledge, but the bottom line is that we need the grants program to begin.

Dr. PORTER. We're almost there, Mr. Chairman.

Senator LAUTENBERG. Mr. Lucero or Dr. Porter, shouldn't EPA be directing the regions to set aside the regional discretionary funds for use when the parties won't settle?

Dr. PORTER. I will comment on that and Gene may want to comment also. If I understand your question, we've had a problem. When we get to the end of a settlement discussion, we have two options: to go the enforcement route Gene talked about, or to go the fund route and say we couldn't reach agreement so we're going to move out with the fund, clean up the site and bill you later.

One of the problems we've had to some extent is people realizing that project wasn't funded that year; therefore, we're really serious about making a decision. I've asked Mr. Longest to set some money aside so that we have at least some discretionary funds where we can go ahead with a design and don't have a hollow threat. We're going to be doing that.

Senator LAUTENBERG. Mr. Lucero, do you want to comment on that?

Mr. LUCERO. I would just echo what Dr. Porter said. It's real important that people believe that, again, either we will take the enforcement action or, where appropriate, will be prepared to start the work. A lot of people look at the list of sites that the agency has identified and say, "My site isn't on the list. I guess I don't have to worry." Well, we think we have a way to deal with that. It is, as we have suggested, we will keep that money in reserve so we can take actions where it appears necessary.

Senator LAUTENBERG. Can we move cases along more efficiently by pushing for a more thorough case development by the regional legal staffs?

Dr. PORTER. I think we can certainly make some improvements here. We have a whole series of things we're doing. I think maybe Gene Lucero would want to comment on that more specifically.

Mr. LUCERO. Senator, I think we constantly recognize that if we were to do a better job upfront in the process, we will save time down at the end. One of the problems I think the folks in the regions who are trying to implement this have is they have so much that they're responsible to do and they're always trying to achieve the minimum to keep the process moving, but can't necessarily take those extra steps to invest heavily to do that front-end work.

So we've tried to look at ways in which we can assist the regions by trying to reduce the number of things so that someone can do that indepth preparation. For example, we would like to pull out from some of the overall responsibilities of, say, the remedial project manager—the responsibilities for cost documentation and for administrative record, for PRP searches, and focus those in individuals that are responsible for primarily that task. That person will do a more thorough job and it will contribute to the ultimate processing of the entire process. The project manager will have less diversion from his primary task, and the others will be able to do the thorough, indepth work that will support the process and make it move better through it.

We realize that we haven't gotten to that point soon enough because we see too many of our regions who are overloaded with a lot of different activities.

Senator LAUTENBERG. Should we have more specialization among the legal staff in the regions?

Mr. LUCERO. And the technical staffs, yes. We're going to try to do some of that to promote this process.

Senator LAUTENBERG. Mr. Lucero, is there some value to creating legal expediter positions in the regions and at headquarters? Can we move the process along a little more rapidly if we had that kind of position?

Mr. LUCERO. Dr. Porter issued, with the Assistant Administrator Tom Adams, a document called "Streamlining the Settlement Process" some time ago. It really took that concept at an earlier stage. It was before people had heard of the concept of an expediter and said, well, we need a process for expediting decisions of agencies. So we created a settlement decision committee, and that has been available for people to bring key decisions into the process and is working. It is moving that part of the process better and faster. Those regions that have tried it are generally very pleased and it is helping the process.

The idea of an expediter is one that's come to our attention here recently, and I think it has some merit. We've raised the idea with some of our regional people, and I think we need to talk it over some more, about how it might work, where the expediter would be located, whether it be a regional person that carries it in or whether we'd have a headquarters function, but I think it has some merit because the process has become so complex that it's possible for the process to hang up on any number of different places in it and someone should be responsible probably to keep it moving.

Senator LAUTENBERG. I want to just ask about whether or not we could get better oversight at sites, Dr. Porter, if EPA was able to help out the regional site managers by directing other regional staff to work with site managers at specific sites? Would that improve the process?

Dr. PORTER. Do you mean within the region itself? I think we're doing that. There are many service organizations that get involved at a site. We tried to make it clear that the important thing is to move that site cleanup and that the project manager needs that kind of assistance.

Senator LAUTENBERG. We may need a more formal structure on that. I'm also talking about the interregional opportunities that we have.

Dr. PORTER. Oh, OK. Yes, OK.

Senator LAUTENBERG. I want to wrap up this session, to say thank you to everybody who has participated. I'd like to say this: That the possibly good intentions of some at EPA have not overcome some of the philosophical differences that we wrestled with in the design of SARA. I still must tell you that I think there's reluctance to jump in and say, OK, this is the law and this is the way we have to perform; these are the targets that we have to meet.

I don't know whether it's coincidental or deliberate at times, but I find, even as we talk here today, that some of the things that you're adopting as current procedure I think might have been adopted before, and I'm using the first 6-year, first 5-year cycle of the Superfund as the place that a lot of the lessons should have been learned.

You know that you've got a very important task in your hands. I would urge you to try to structure your management organization so that it is more operational in character. Again, I know that a lot of decisions have to be made along the way before you trigger off an operational response. I would hope that there's not regional rivalries and differences but regional cooperation. I am persuaded when I see the differences in performance from region to region that there are reasons for it, reasons that go beyond environmental and geographic differences to management factors.

I observe that OMB often has a lot more to say about the way the agency functions than the management of the Agency, and we continue to struggle with that.

But I am also convinced that the talent and the ability is there to do this job. It's very easy to get discouraged by long, complicated projects. But we must move ahead with greater commitment and urgency.

The critics that also testified today, very frankly, we're reasonable in their criticism, I would urge you to listen to them very carefully and review the testimony. There hasn't been enough done and that's not the judgment of this chairman, but also the judgment of the people in the community.

I thank you very much for being with us and urge you to follow up, to work cooperatively with the subcommittee to improve the program. I thank you for your willingness to work with us on these points that we've recommended in our statement, and hope that you'll respond, that you'll get back to us where you see any problems with it.

Dr. PORTER. OK. Thank you, Mr. Chairman.

Senator LAUTENBERG. Thank you. That concludes this hearing of the subcommittee.

[Whereupon, at 12:27 p.m., the subcommittee recessed, to reconvene at the call of the Chair.]

[Statements submitted for the record follow:]

CLEAN WATER ACTION

Testimony of

Henry S. Cole, Ph. D.
Science Director, Clean Water Action Project
Research Director, National Campaign Against Toxic Hazards

and,

Bill Walsh, Attorney
U. S. Public Interest Research Group

on the Implementation of the Superfund Law

before the Subcommittee on Superfund and Environmental Oversight

Senate Committee on Environment and Public Works

December 10, 1987

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Introduction.

Senator Lautenberg, with me today is Bill Walsh, attorney for the U. S. Public Interest Research Group. We would like to thank you and other members of the subcommittee for this opportunity to comment on the implementation of the new Superfund Law. On behalf of the Clean Water Action Project and the National Campaign Against Toxic Hazards, and U. S. PIRG, we would like to express our appreciation for the leadership role that you played in passing a strong Superfund reauthorization and for your continued efforts to press a reluctant administration to implement the cleanup requirements of the new law.

Over the past three years, I have observed the Superfund process first hand as a technical consultant to more than a dozen community groups dealing with Superfund sites. I have also written a series of reports on EPA's Superfund cleanup program. The latest of these reports, written with Bill Walsh of U. S. PIRG, and released in November, is a one-year assessment of EPA's cleanup program under the new law. The report (attached) provides evidence showing that EPA is neglecting to carry-out key provisions of the new law.

This hearing addresses the question of the efficiency of the Superfund program. This is an important question because although billions of dollars have been spent, the rate of progress, as measured in completed cleanups, is painfully slow. To date, only 13 sites have been completely cleaned up.

Citizens who are directly affected by Superfund sites are painfully aware of how slow the system operates. Congress expressed its own concern by enacting a set of schedules and targets for the program.

Lack of Leadership.

Cleaning up a Superfund site is often a difficult technical problem; the job is complicated by the many players and parties and by a complex set of legal, social and economic factors. The causes of delay and inefficiency are varied and numerous and seem to vary from site to site. Nevertheless, I believe that the program has been hindered over the past seven years by a serious lack of leadership on the part of the Administration.

Under SARA, there is no longer any excuse for uncertainty or delay. The Agency's statutory mandate is clear; unfortunately its policies and goals remain mired in pre-SARA vagueness and uncertainties.

The lack of clear cut policies and goals and a strong will to carry-out the law manifests itself in many ways that effect the efficiency of the program; I will summarize several of these:

o guidance is fuzzy and in some important respects at odds with the law and with public expectation leaving project officers to read Headquarters tea leaves as a substitute for objective decision making criteria. As a result, the degree of protection provided varies markedly from site to site;

o the project officers and other front line troops are hard working and dedicated; however, they are ill equipped to deal with their enormous responsibilities; many are poorly qualified or receive too little training; turnover rates are high;

o as a result, supervision of consulting firms is weak, and the firms rather than the agency make critical judgments;

o technology research, development and transfer has received far too little attention and funding;

o the Agency approach to reluctant responsible parties is more often to appease than to enforce; decision-makers waiver and bend between the alternating pressures of public outcry and those exerted in private by powerful responsible parties; this adds enormously to response time.

Efficiency: Real and False.

It is important that we determine the sources of delay and work to make the Superfund process more efficient. But it is absolutely essential that we distinguish between what is efficient and what is simply quick, between what is progress and what simply looks good on paper. There is a real danger that pressures growing out of legitimate concerns over the slow movement could motivate EPA and states to make decisions which appear to save time (or money), but which in the long term result in serious and costly setbacks for specific cleanups and for the program as a whole. One example is the annual late summer rush to issue Records of Decision by the close of the fiscal year on September 30, bean-counting time. The rush can lead to careless judgement and to a short-changing of public participation. A variant of bean-counting is bean discounting; in this ploy the Administration has attempted to arbitrarily exclude certain categories of waste sites (e.g. municipal landfills) from the Superfund program.

Time does not permit a full discussion of these problems; instead I will focus on several areas where major changes are needed to improve the efficiency of the Superfund cleanup program:

1) The most efficient cleanups are permanent cleanups. The agency has already been stung on several occasions by the failure of allegedly "permanent" containment remedies, wasting precious time, and millions of dollars.

2) Efficient cleanups cannot be achieved without an early investment in data collection that will provide an accurate

3-dimensional portrait of each site. Without such an investment, cleanup decisions are a crap shoot. We must not skimp on information gathering as a shortcut to the remedial design stage.

Permanent Cleanups are the Most Efficient Cleanups

Congress clearly recognized that a "stitch in time saves nine" when it required in Section 121, that EPA, to the maximum extent practical, employ permanent remedies. Senator Lautenberg is intimately familiar with the failure of those remedies which attempt to contain large volumes of hazardous waste. At the LiPari Landfill in Pitman, New Jersey, EPA in 1983 installed a synthetic liner and a slurry wall -- a solution touted as state-of-the-art containment. Just two years later, the Agency found that large quantities of groundwater were seeping through the containment and it had to start the feasibility study and remedial selection process over again -- the final remedy, with out debating its merits, will take additional years to complete. The point is that years of avoidable delay were created through the initial choice of containment.

Despite the permanent treatment provision of SARA, EPA continues to select impermanent remedies at a majority of sites (see attached study). We are particularly concerned that EPA is planning to use containment based remedies at a number of sites which lie in sensitive environmental settings such as flood-prone areas or in areas where critical public water supplies are vulnerable to contamination.

One example is the Bayou Sorrell site located about 20 miles southwest of Baton Rouge, LA. A number of disposal areas at this site contain pesticides, herbicides, cyanides and extremely dangerous hydrogen sulfide-bearing materials. Despite the fact that the site is surrounded by water (rivers, bayous and backwater swamps) and subjected to seasonal flooding, EPA has chosen to consolidate waste materials and contain them at several of the units, using caps and slurry walls. Nearly all of the wastes will remain onsite; no treatment will be used for any of the problem units at the site. Moreover, units which will receive wastes do not meet RCRA standards for disposal. Given seasonal flooding of the area, it is difficult to see how the plan will meet EPA's own remedial objective: to limit the release of contaminants to ground and surface water. Like LiPari Landfill, Bayou Sorrel will probably have to remedied over again.

Accurate Information Gathering; An Essential Element of Efficient Cleanups

Gathering and analyzing data is a critical part of the cleanup program. It is cost-effective to make a strong investment in understanding the nature and distribution of wastes at the site, the environmental setting of the site, and the potential paths of migration. Let me illustrate how important an accurate understanding of the site is using the hydrogeology of the Ciba-Geigy site in Toms River, New Jersey. At this site, the company engaged in a long period of illegal dumping into the highly permeable sands of its property. Groundwater is extensively contaminated with a variety of carcinogens.

Figure 1, (Source of Figures EPA Region II) shows the original interpretation of the stratigraphy underlying the site. In this view, a continuous layer of impermeable clay prevents contaminated water in the shallow aquifer from entering the deeper aquifer. Moreover, the Toms River (to the east of the site) was thought to serve as a barrier to further migration of contaminants. The natural barriers were thought to protect important public water supplies. For more than a year, EPA, its contractors and the Ciba-Geigy Company have put forth this view -- often in beautifully colored slides. The view has been the basis of the remedial selection for the same year.

In this case, however, an EPA geologist, spurred by public concern, began to have doubts -- he reanalyzed the well borings and other evidence and determined that the clay layer is sporadic rather than continuous; thus, contaminated groundwater is free to migrate to the deeper aquifer and underneath the river (Figure 2). The distinction is not academic; as Figure 3 illustrates, the flow below the Superfund site in the deep aquifer is directly towards a major municipal flow field. This discovery, fortunately comes in time to influence the design of a groundwater pump and treatment system; however, many analyses will have to be redone and delay has resulted.

In the Ciba-Geigy case, several hundred monitoring wells were used to gather information on contaminant migration, stratigraphy and flow. Region II has also shared information with the public, as well as the responsible party, at very early stages. Unfortunately, there are many serious sites where remedial selections are being made with far less data gathering and public sharing of information.

An example is the Industrial Excess Landfill, located in the Akron/Canton area of Ohio. IEL is an extremely dangerous site. Rubber companies and other firms from the Akron area dumped millions of gallons of hazardous waste into a 30 acre landfill. More than 20,000 people in the Lake Township depend on groundwater in the area as their sole source of drinking water; scores of families live within a half mile of the site. Soils are permeable. Gas containing methane and toxic volatile organic compounds is generated in the landfill; while emergency response (a gas venting system) has eliminated the possibility of explosion in nearby homes, gases generated throughout most of the landfill are not collected by this system; the possibility of toxic gas migration has not been ruled out. Chemicals, including a number of known and suspected carcinogens found at the site, have been found in well water, indoor air samples, and in the blood of residents.

Despite the dangerous nature of the site and widespread citizen concern, Region V has exhibited a pattern of skimping on critical databases; the original database was "bare bones". Additional testing is done in drips and drabs and has only come in response to a crescendo of political pressure.

Region V's portrayal of groundwater flow, based on very limited data, has changed repeatedly. Monitoring wells have been constructed at only about a dozen locations; far too few to locate or delineate a contaminant plume; the stratigraphy is poorly known. This scant database was used by the agency in limiting alternative water to 100 families living immediately to the west of the site; however, the State of Ohio has intervened with additional money to enable additional families to the area to be connected with alternative water.

o distribution of wastes in the landfill: EPA has ruled out core sampling into the 30 acre landfill despite citizen requests; this deficiency will make it difficult for Region V to evaluate permanent remedies;

o EPA has refused to do deep gas sampling within the landfill; the absence of such data means that Region V cannot assess the impact of various remedial alternatives (e.g. capping) on internal gas pressures, gas migration, and the safety of homes in the region. Their position is both irresponsible and inconsistent with SARA's requirement for cleanups that are protective of human health.

The limited database is likely to limit the remedial alternatives that can be considered, or result in a cleanup that is poorly matched to the actual problems at the site. Another possible outcome is that EPA will have a change of heart and institute a major upgrading of its Remedial Investigation. We would welcome this change. Clearly an early investment in critical data gathering activities would have led to a more timely and effective cleanup.

As a result of Region V's actions, EPA has little credibility with the public and with the media in the Akron-Canton area. Major editorials and cartoons have criticized the Agency's handling of the site (attachment 2). Responsible parties at the site include the nation's largest rubber manufacturers; EPA should be able to recover the costs of data gathering from these "deep pockets." The public perception is that EPA has been more protective of corporate expenditure than it has of public health.

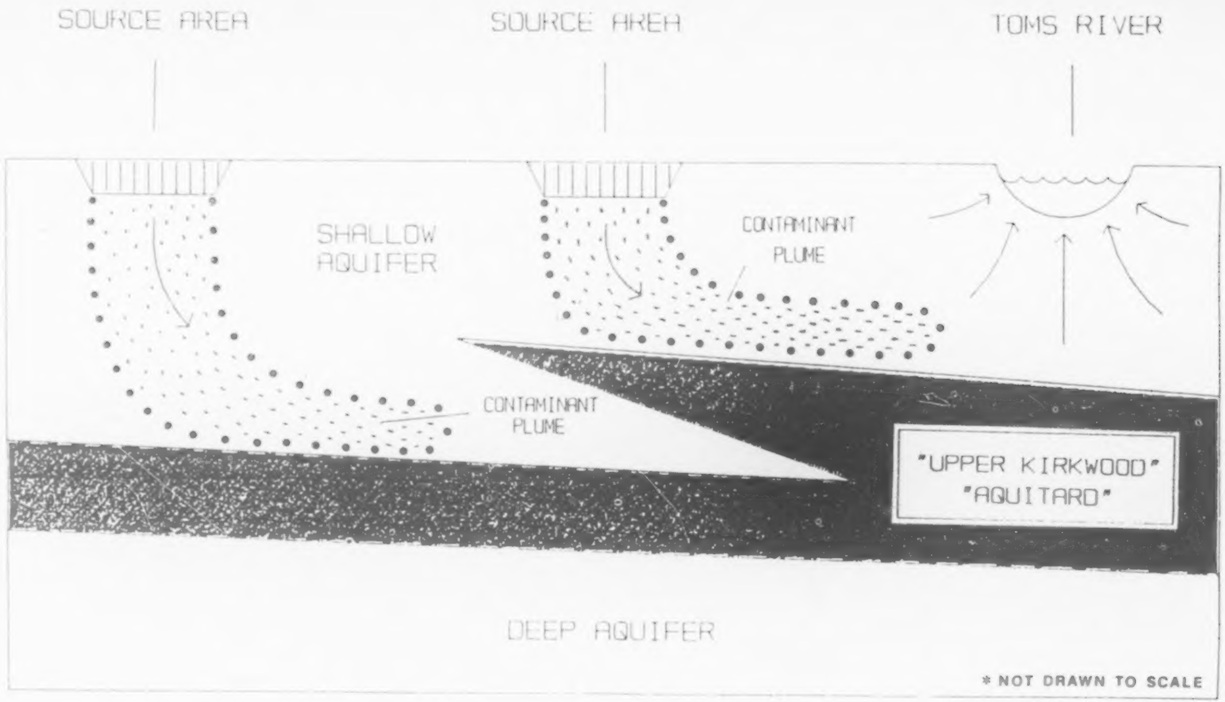

SOURCE AREA
SOURCE AREA
TOMS RIVER
SHALLOW AQUIFER
CONTAMINANT PLUME
CONTAMINANT PLUME
"UPPER KIRKWOOD" "AQUITARD"
DEEP AQUIFER
* NOT DRAWN TO SCALE

FIG. 1

SCHEMATIC DIAGRAM SHOWING THE ORIGINAL INTERPRETATION OF THE "UPPER KIRKWOOD" ZONE AS BEING AN AQUITARD CAPABLE OF PREVENTING THE DOWNWARD MIGRATION OF GROUNDWATER CONTAMINANTS.

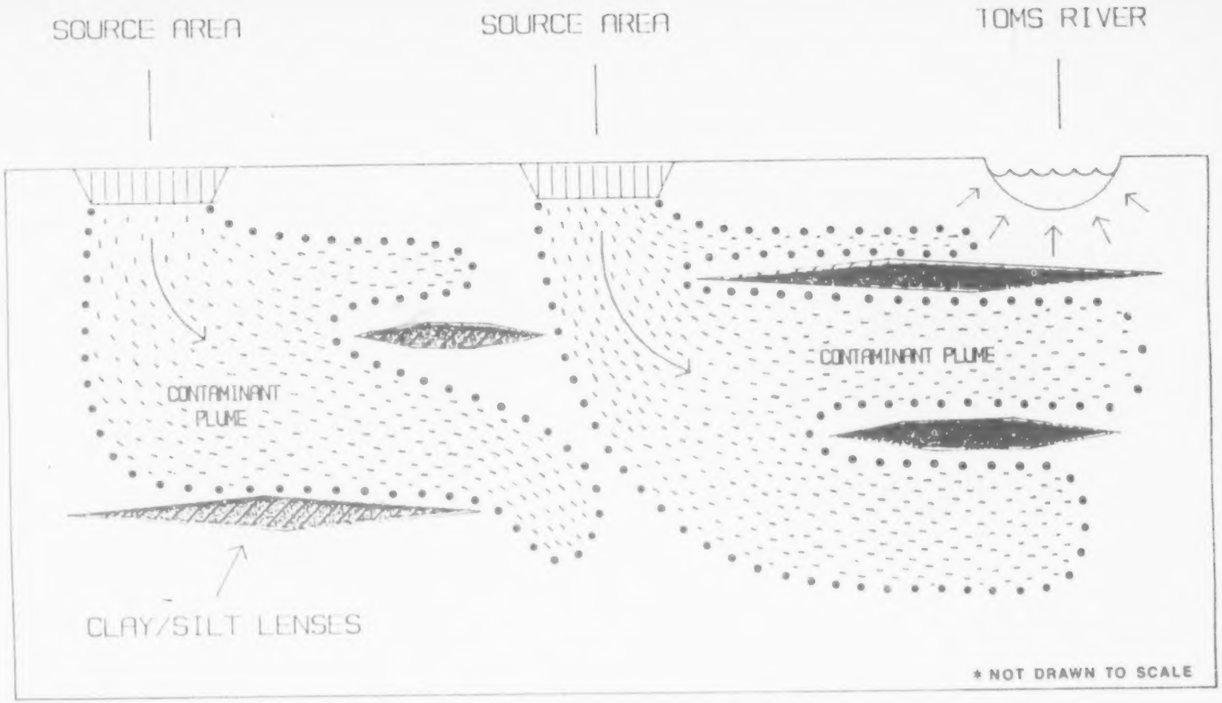
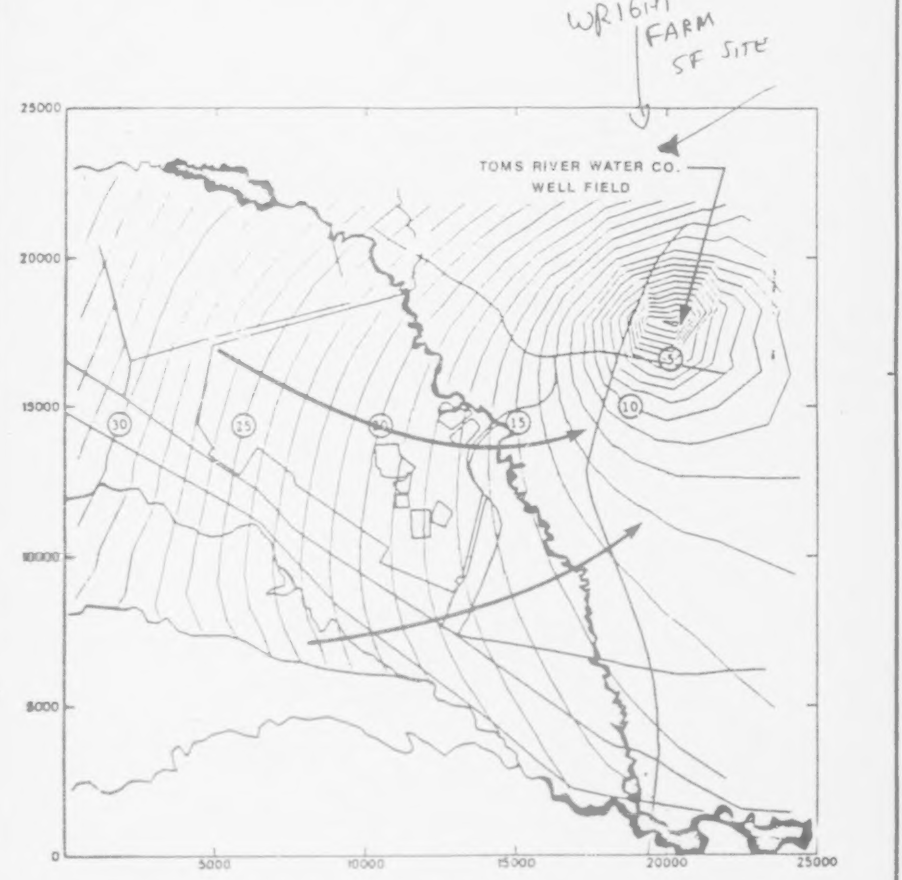

SOURCE AREA
SOURCE AREA
TOMS RIVER
CONTAMINANT PLUME
CONTAMINANT PLUME
CLAY/SILT LENSES
* NOT DRAWN TO SCALE

FIG. 5

SCHEMATIC DIAGRAM SHOWING THE CURRENT INTERPRETATION
OF THE "UPPER KIRKWOOD" ZONE AS NO LONGER BEING AN "AQUITARD"


WRIGHT FARM SF SITE
TOMS RIVER WATER CO. WELL FIELD
25000
20000
15000
10000
5000
0
5000
10000
15000
20000
25000
30
25
20
15
10
5

POTENTIOMETRIC SURFACE OF DEEP AQUIFER SANDS
(FORMERLY REFERRED TO AS "LOWER KIRKWOOD SANDS")

* ARROWS INDICATE THE DIRECTION OF GROUNDWATER FLOW.

CONTOUR INTERVAL=1 FOOT

FIGURE 10

Calibrated Piezometric Heads-Lower Kirkwood Sands

Ciba-Geigy Site
Toms River, New Jersey

CDM
environmental engineers, scientists
planners & management consultants

STATEMENT OF DR. JOEL S. HIRSCHHORN
SENIOR ASSOCIATE, OFFICE OF TECHNOLOGY ASSESSMENT
BEFORE THE
SUBCOMMITTEE ON SUPERFUND AND ENVIRONMENTAL OVERSIGHT
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

December 10, 1987

Thank you Mr. Chairman for giving OTA the opportunity to contribute to your oversight hearing of the Superfund program. We have preliminary information from our ongoing Superfund Implementation assessment, a study which you requested earlier this year. Today, I will briefly review our analysis of data, all of which have been provided to us from EPA files and reports. We are not aware that EPA has reported this data publicly or analyzed them in the manner I will report on here.

SUMMARY

The Superfund program has faced substantial expansion while still in its infancy. Novel technological problems, high public expectations, and considerable legal and organizational complexity also create unusual management problems. My comments are given in the spirit of constructive criticism. Everyone's goal for Superfund is to get more environmental protection faster and with less cost. The program's complexities and technical challenges make it difficult for its managers to satisfy reasonable environmental goals, not to mention the public's demand for quick, perfect cleanups. Nevertheless, the data, and our analysis of them, suggest that achieving the Superfund program's environmental mission has become a secondary activity for a variety of reasons.

First, bureaucratic goals seem to overshadow environmental priorities and technical information and issues. Examples of the bureaucratic problem are:

o In the past two years two thirds of EPA's decisions on how to clean up sites have been issued in the month of September, coincident with the deadline for EPA workers and Regions to complete their fiscal year records. Bunching of decisions reduces time for proper reviews, of documents which precede the cleanup decision, by the public and State agencies, and reduces time for EPA to examine comments and consider alternatives. Some site studies may be rushed to meet the administrative deadlines. There seems to be no sound environmental or engineering explanation for such bunching of decisions.

o EPA has changed its criterion for the first screening of sites. Instead of dropping sites only if they posed no threat to health and environment, EPA now plans to raise the number of sites to be dropped from 30 percent to 40 percent. Although EPA will use scoring estimates and judgments at a stage when little information on the site exists, they seem to hope that only those sites which are likely to get placed on the National Priorities List (NPL) will pass the first screening step. No attention has been given to false negative decisions; that is, inaccurate eliminations of sites that really do need cleanup. Many hundreds of these may exist.

o After EPA revises its site scoring methodology as directed by Congress, only those sites which have exceeded EPA's arbitrary cutoff will be reevaluated at the first rough screening stage. Those sites below the cutoff which are eliminated initially from the Superfund system will not be reexamined. Whatever the motivation, this procedure seems very likely to let false negatives escape.

EPA could help improve public confidence in Superfund by placing greater attention on explicit concern about environmental issues and consequences. Senior level managers could ask themselves "Will this decision make environmental sense to the public?" As an example, EPA management, rather than emphasize total output over the fiscal year, could reward individual and Regional efforts which avoid end of fiscal year bunching.

Second, the level of environmental protection that people near hazardous waste sites receive seems to be significantly affected by which EPA Region they live in. The statement, which is often heard, that there are ten different EPAs in the nation appears justified. It suggests that EPA headquarters doesn't give sufficient uniform technical direction and oversight to the Regions about environmental concerns; it does urge the Regional offices to produce reports and decisions--the number of reports and decisions apparently being a way for EPA to try to satisfy all the pressures and demands on it to show that progress is being made. Examples of inconsistent Regional practices are:

o At the first rough screening step, EPA Regions VI (AR, LA, NM, OK, TX) and VII (IA, KS, MO, NE) eliminated 80 percent and 76 percent, respectively, of the sites which were identified as potential Superfund sites; Regions II (NJ, NY, PR, VI) and III (DE, MD, PA, VA, WV) cut only 1 percent and 5 percent of sites at the first screening step.

o For the same number of cleanup decisions in FY87 Region V (IL, IN, MI, MN, OH) issued 83 percent in September and Region VI issued only 27 percent in September.

o In Region VI, 35 percent of NPL sites have been judged to pose some threat due to air releases of hazardous substances, while in Region IV (AL, FL, GA, KY, MS, NC, SC, TN) only 4 percent of sites have been so judged.

OTA is an analytical not an investigative agency; there may be plausible reasons that explain these differences, in part. To address this problem of lack of national consistency, EPA could reexamine the extent of autonomy its Regional offices should have, could routinely assess data on Regional performance and activities to spot problems, and could learn from successful Regional experiences in order to offer constructive guidance to problem plagued Regions. Senior EPA headquarter's managers could ask "How can the basis of success in some Regions be shared by all?"

Third, the program shows little signs of improvement. Delays are widespread and the program reforms which have been instituted seem unlikely to remedy the situation. In this area, EPA has a particularly hard job. Studies and cleanup implementation take a long time, in part because of more stringent environmental statutory requirements and public expectations and demands not always grounded in technical realities. Indicators of the problem are:

o Over six years, about 80 percent of cleanup decisions (necessary before cleanup work can begin) have been made for sites on the original list of about 400 NPL sites. Meanwhile, another 550 sites have been added and EPA expects to list another 1600 sites next year. Assuming that EPA more than doubles its annual number of cleanup decisions to 200 and that no new sites are added after 1988 (most unlikely), it will be the year 2000 before all the sites will have been studied and decisions reached. Actual cleanups will be going on many years afterwards.

o Although EPA speaks of an average of 25 months to complete site remedial cleanup studies, our analysis of FY87 data reveals a 34 month average. We don't see the basis by which EPA can meet its stated goal of reducing the remedial cleanup study time to 18 months. The one area that appears a good target for improving efficiency is reducing redundancy between the preremedial site inspection and the remedial site investigation. But these are managed by different groups in EPA and both are being independently expanded.

o Large amounts of Federal money can be spent on studies relative to amounts spent on actual cleanup. At the Lipari Landfill in New Jersey, 80 percent of the $5 million spent thus far has been on studies, and at Love Canal in New York about 50 percent of the $20 million spent thus far has been on studies. More studies are likely at both sites and other money has been spent on these sites by private companies and State agencies.

EPA could devote more resources to finding ways to simplify the Superfund program process. It could use management consultants or other experts who are not now implementing its programs and who, therefore, may be able to offer more objective ways to improve efficiency. There is considerable need to examine the program relative to its fundamental objectives without being constrained by existing organizational units. Improving efficiency demands comprehensive examination and a willingness to consider reorganization.

LIMITED PROGRESS AS SITES INCREASE

About 80 percent of all the remedial cleanups decisions made since 1982 have been made for sites on the original finalized NPL issued in 1983. (This 1983 NPL contained 406 sites; the latest NPL contains 802 final sites with another 149 proposed.) In FY87, 60 percent of Records of Decisions (RODs) were for 1983 NPL sites. Even so, a ROD has been issued for only about half of the original 1983 NPL sites. And now there are nearly one thousand sites on the NPL. In the near term, in response to SARA's (Superfund Amendments and Reauthorization Act) directive to increase the NPL by 1600 to 2000 sites by 1988, EPA has decided to target the 1600 figure only. In the long term the NPL might get much larger; in Superfund Strategy we estimated a potential NPL of 10,000 sites.

In FY87 EPA issued RODs on 74 sites; 28 that were supposed to be issued were not, and 10 that were not planned were issed. EPA's recently stated objective of issuing 120 RODs in FY88 seems optimistic, even if it doesn't improve its level of technical oversight and quality control. The slowdown in funding in 1986 caused a late start for many site studies and this should adversely affect FY88 output of RODs.

CHOOSING NPL SITES FOR STUDY

How does EPA choose which NPL sites to study and act on? This brings us to the basic concept of the NPL and the scoring of sites using the Hazard Ranking System (HRS). As I said earlier, most sites getting RODs are still from the original 1983 group of 406. Sites seem to be getting attention on the basis of their HRS scores, but 1983 NPL sites without RODs have an average score only slightly less than those with RODs.

However,some sites with high scores do not get expeditious attention. For example, the GE Moreau site in Region II which scored very high first became eligible for study in December, 1982 but its study began nearly a year later and its ROD was issued in July, 1987. Study began on another site in the same Region with a lower score a year and a half earlier. In Region IV, the Gold Coast site which first became eligible in November, 1981 and scored nearly as high as the GE Moreau site did not have its feasibility study begun until February, 1986 two years after its RI was completed.

Does it make sense to give preference to 1983 NPL sites over later comers to the NPL? We have examined (HRS) data [groundwater subscores only for reasons discussed later] for some sites to get a sense of whether sites added later to the NPL are more or less hazardous than those added earlier. Some people believe that sites identified more recently are less hazardous than the sites which entered the system earlier. If this were so, then giving preference to 1983 NPL sites would be good policy. However, in examining all NPL New Jersey sites, we find that sites put on the NPL in 1983 have an average score of 67.58, post 1983 sites an average of 64.06, and 1987 sites only, an average of 66.11. For California we find an average score for 1983 sites of 54.44 and for 1987 sites a value of 69.15. We suspect that this trend will probably hold for the nation and, therefore, that the original group of 406 sites are not markedly more hazardous than the latecomers. We will extend our analysis to determine to what extent estimated environmental hazard is the basis for selecting a site for a detailed remedial cleanup study.

END OF FISCAL YEAR BUNCHING OF CLEANUP DECISIONS

The Record of Decision (ROD) is the key document for the remedial cleanup program because it selects the goals and technology for the cleanup. In reviewing a tabulation of all RODs, we found that, over six years, 54 percent of the 280 RODs were issued in the month of September and 65 percent in the last fiscal year quarter (see Table 1). This phenomenon has grown more marked, especially in the past two years, where the average is 68 percent RODs in September and 73 percent in the last quarter. In comparison, in the first three years of the program 24 percent of RODs were issued in September and 44 percent in the last quarter.

This degree of end of fiscal year bunching of RODs is cause for concern because it limits public and State review of RODs, as I explain below, and makes it less likely that EPA can carefully examine comments and consider alternatives. This bunching also exacerbates the problem of overworked and inexperienced EPA staff. It is hard to think of technical reasons why the long process preceding the ROD--from Preliminary Assessment (PA) to Site Inspection (SI) to HRS scoring to Remedial Investigation (RI) to Feasibility Study (FS) to public and State review--could culminate in so many nearly simultaneous RODs. Many delays can occur in moving toward a ROD, because the procedures which precede the ROD are lengthy and not very efficient. If, in effect, a quota system is being imposed on EPA Regions, and, if individual and Regional performance is based on fiscal year results, bunching would occur as compensation for the delays.

Interested parties often get very little time to review key documents such as the Feasibility Study that precedes and is the basis for the ROD. This is particularly troubling under SARA, which emphasizes permanently effective cleanup technologies over containment and land disposal. Reviews and technical work to meet the end of fiscal year deadline are often rushed, so that EPA can use number of RODs issued as a measure of program accomplishments in that fiscal year. State government agencies, public interest groups that assist community groups, and members of Congress are all at a disadvantage when so many critical decisions and documents are released in one month--and in the last few days of the month at that. In FY87, for example, EPA Region II issued 13 RODs in the last week of September, nine of them on September 29 and 30. In all of FY87, Region II issued only two other RODs; those two were issued in July.

As Table 1 shows, some EPA Regions perform without intense bunching, indicating that there is no technical reason or program necessity for strong bunching. For example, in contrast to Region II's 74 percent of RODs in September over six years, Region IX averages 31 percent and Regions III, VI, and X average about 40 percent. Several Regions had many more September RODs in FY87 than in past years. For example, Region V had a five year average of 37 percent until FY87, when September RODs jumped to 83 percent. These national and Regional changes over time suggest that, increasingly, technical and public review--and the quality of cleanup decisions--are taking second place to administrative requirements. Moreover, if the increased September bunching results as compensation for increasing delays in the steps leading up to the ROD, that is a sign that the program is becoming less efficient.

TIME TO COMPLETE THE RIFS PROCESS

To examine our hypothesis about delays, we analyzed data for FY87 to determine the duration of the Remedial Investigation/Feasibility Study (RIFS) process. (The RIFS culminates with a ROD.) EPA has recently said that a full RIFS runs an average of 25 months. A plan released last July by Superfund's Director and based on a contractor study [RI/FS Improvement Analysis, CDM Federal Programs Corp., July, 1987] both use this figure. But neither plan or study contained actual site data. We obtained data for 56 RODs issued in FY87; the average time for the RIFS process was 34 months (see Table 2). In Regions II and V, which had a lot of RODs, the averages were 37 and 39 months, respectively. (For Region II it was 36 months for FY86 RODs.) These figures are particularly striking in view of EPA's publicly stated objective of reducing the RIFS schedule to 18 months. This is best seen as a long term objective to be met after extensive rethinking of the current program, because we cannot find a factual or analytical basis for this projection, which seems very optimistic, for the short term.

Some sites receive repeated RIFS studies. For example, the Lipari Landfill site in New Jersey has had three RIFSs completed: the first completed in 1982 cost $1.6 million, the second completed in 1985 cost $300,000, and the third to be completed in 1988 has already cost $1.6 million. Nearly $500,000 have also been spent on two design studies. In comparison to $4 million for studies thus far, about $1.1 million has been spent on actual cleanup work for Lipari which first became eligible for Superfund response in October, 1981. At Love Canal in New York which also became eligible in October, 1981, about $9.5 million have been spent on four RIFS and four design studies; about the same amount has been spent on actual cleanup work thus far. While these are very large, complex sites where studies and cleanup work will continue, many other sites also receive multiple studies; often Federal money is spent on RIFSs which are then taken over by responsible parties which probably start the study again.

IMPROVING THE RIFS PROCESS

We examined the contractor study which formed the basis for EPA's plans in making the RIFS process more efficient. We found no actual site data or examples of successful attempts to reduce RIFS time in the report. Moreover, the contractor analyzing the existing RIFS system is one of EPA's largest contractors implementing that system. While this means that the contractor brings a lot of experience to its task, we think it would be useful also to use people who can bring a fresh perspective and a greater degree of objectivity to an examination of the current program.

In our past work we have often found problems in the quality of RIFS reports. (See Superfund Strategy, 1985 and a number of specific site analyses.) We also found, in our past work, an apparent lack of internal quality control in contractors and the EPA offices which oversee contractors. Now, in the RIFS Improvement Analysis report we see evidence of the same problems. For example, on one page the RIFS process is said to typically take 25 months, a few pages later it is 27 months. At one point the report says that there are 31 handoffs among different parties working on the RIFS project but later this factor (which the report says explains delays) becomes 21. The contractor conducted a survey of EPA Regional staff, but the results were either ignored or misinterpreted. For example, the Regional staff viewed the contractor's critical path methodology negatively, with comments like "cannot follow," "too confusing," and "many time frames are not realistic." Still, the methodology was the basis for the report's recommendations. The improved RIFS schedule in the report only cuts about 2 months off the current one, and the report's analysis provided no basis for an 18 month RIFS.

Most importantly, the contractor seems to have missed one of the most important ways to truly improve the efficiency of the RIFS process, even though a number of Regional survey respondents discussed it. This is to better integrate the Remedial Investigation with the Site Inspection which precedes it. However, one of the changes proposed by the report would increase the RI by about 4 months. At the same time another part of EPA headquarters has decided to improve the preremedial process (Preliminary Assessment, Site Inspection, and HRS scoring) by expanding the SI and creating two phases. The second phase is supposed to provide "information to support development of an RI workplan." The SI and RI involve essentially the same types of activities and gather essentially the same type of information, but are normally done by different parties.

We agree with the Regional EPA respondents to the contractor survey who maintain that, by better integrating the SI and RI, the total process for a site would become substantially shorter and cheaper. Lack of integration among different bureaucratic functions is widespread within the Superfund program. If, as CDM says (and we agree), "RI/FS projects continue to be troubled by increasing costs and schedule durations," then to fix the problem senior EPA officials will have to provide leadership that cuts across existing bureaucratic divisions.

ELIMINATING SITES IN THE PREREMEDIAL PROCESS

One of the least visible parts of the Superfund program is the preremedial process where about 90 percent of sites are ultimately eliminated and about 10 percent make it to the NPL. We are concerned about the possibility of false negative results; that is, deciding that a site does not require cleanup when it really does. In the health care area false negatives are considered a major issue. However, in Superfund, where uncontrolled sites are cleaned up because they pose threats to health and environment, nearly no attention is given to understanding the probability and implications of false negatives.

We find circumstantial evidence for a major false negative problem in Superfund. First, data on actions taken by EPA Regions show that the fraction of sites which have received a Preliminary Assessment (PA), the first screening step in Superfund, and which have been given a No Further Action (NFA) classification varies remarkably across Regions. Nationwide, about 28 percent of PAs have become NFAs [many more sites are cut after the SI step]. However, Regions VI and VII average 80 percent and 76 percent, respectively, while Region II only cut about one percent of its sites, Region III cut 5 percent, and Region V 8 percent. (See Table 3). Regional variations are so large that if we exclude the three Regions with low NFA rates, the national average NFA rate is 44 percent instead of 28 percent.

What technical reasons could explain such substantial variations in the NFA rate? EPA headquarters does not seem to have examined the situation. Shortages of EPA oversight staff and inexperienced workers in State agencies and contractors justifies concern about false negatives. For the past six years EPA has given little technical guidance to EPA Regions and States on how to conduct a PA. Once a site gets a NFA label it is unlikely to be picked up by State programs, which have difficulty finding resources to deal even with high priority sites.

The probability of false negatives in some regions could be substantial. Recall that 90 percent of all sites which enter the Superfund system are eliminated; with a site inventory approaching 30,000, a false negative rate of 10 percent would--if corrected--add another 2700 sites to the NPL; that is, more than double EPA's currently anticipated size.

Second, a recent study (which has a number of errors in its calculations) shows that EPA wants to increase the national average of NFAs to about 40 percent. EPA had one of its major contractors who implements the preremedial process examine the program [*Workload and Resource Requirements for Preliminary Assessments, Site Inspections, and Hazard Ranking System Evaluations Under SARA*, Ecology and Environment, October, 1987]. The only mention of the false negative issue in the report is "It is *assumed* that the EPA Regional offices tend to err on the side of caution, and that the incidence of false-negatives is rare." [emphasis added] The report gives no data to support this statement, nor does it discuss the data given here on NFA variations among Regions, which were, however, included in the report's apperdix.

On the other hand, the contractor study emphasizes correcting false *positive* results; that is, eliminating more sites early because they do not really need a cleanup. However, false positives, which risk money but not people's health, have a good chance of being identified in subsequent steps, although of course, not before more money has been spent on them. Only 2 percent of RODs (six sites thus far) have resulted in no action decisions. That is, the false positive rate seems to be about 2 percent. A false negative rate equal to this 2 percent would let 600 sites that really need cleanup escape.

Third, EPA's new policy on PAs makes a fundamental shift in the criterion used to determine NFAs. The original criterion was that the site should not pose a threat to health and environment. This meant, for example, identifying sites which did not really exist or were already listed by another name, or demonstrably had no hazardous waste or contamination. The new policy is: "Sites that have no reasonable probability of scoring high enough for NPL listing, based on the preliminary HRS scoring procedure, will be designated as 'no further action' (NFA)." This does not refer to the final HRS scoring, which occurs after the SI, but to a preliminary scoring which occurs as part of the PA and uses some shortened form of the HRS and very incomplete information.

There are many technical concerns about the limitations and inadequacies of the HRS procedure, even in its long-form version, which OTA and many others have commented on in detail. (See, for example, Superfund Strategy.) The shortened forms are likely to have all the inadequacies of the complete version--and more. Increasingly, only those sites that end up on the NPL get the full HRS analysis with the information obtained in the SI. And, even in the final HRS scoring, after the SI, an arbitrary cutoff score of 28.5, which has no significance to environmental or cleanup need, will still be used. It seems likely that the data given here on Regional NFA rates reflect the fact that a few Regions have been implementing the new policy for some time while others have used a more stringent environmental criterion.

PROBLEMS WITH APPLYING THE SITE SCORING METHODOLOGY

To further illustrate our concerns about the HRS methodology, we examined the total list of current NPL sites. One observation is about the air route exposure subscore, one of 3 such scores that determine the HRS total score. Nationally, only 14 percent of sites have any numerical air subscore. But here, too, Regions vary widely. Regions IV, V, and IX have air subscores for only 4 percent, 6 percent, and 8 percent of their NPL sites. Region VI, with climate and geology similar to Region IV, has air subscores for 35 percent of its NPL sites. Moreover, the use of the air subscore has changed substantially over time. In 1983 over 20 percent of NPL sites had air subscores, but for the last major addition to the NPL in 1987 only about 4 percent had air subscores. Thus, many sites may not make it to the NPL because no attention has been given to past, current, or potential releases of hazardous substances to the air.

We see some similar, but less important trends in the surface water subscores over Regions and time. Because of inconsistent use of air and surface water subscores, it seems to us that analysis over time of HRS scores is best made with the groundwater subscore only, as we have done above. A striking example of the problem with using total HRS scores is that of California. For sites which entered the NPL system in 1983 or earlier, 21 percent had subscores of zero for both surface water and air for sites entering after 1983, 86 percent had zero subscores for both surface water and air.

The HRS is being revised according to Congressional direction. Although it will include additional information, we have evidence from some work by EPA itself that it will remain a poor indicator of actual site hazard. But the new EPA preremedial policy directs Regions to revaluate sites which have received PAs but not SIs with the new HRS only if the sites achieve a high enough score with the old HRS to be listed on the NPL. Sites which reach too low a score with the current HRS are to be designated NFA and will not be reexamined with the revised HRS. Whatever the motivation, this procedure seems ideal to let false negatives escape.

TABLE 1

EPA Region	Percent NPL Sites	Percent RODS	Percent FY Quarter RODS				Percent September RODS
			1	2	3	4	
I	6.1	8.2	13	4	0	83	61
II	18.4	18.9	6	2	13	80	74
III	13.9	13.6	3	21	27	50	42
IV	10.9	10.7	0	10	17	73	67
V	24.0	20.7	3	9	24	64	47
VI	5.7	9.3	16	19	23	42	38
VII	4.7	3.2	0	11	0	89	56
VIII	3.9	6.1	0	6	18	76	65
IX	8.3	5.7	19	0	31	50	31
X	4.0	3.6	20	10	20	50	40
All Regions	100	100	6	10	19	65	54

Source: EPA, Records of Decision (RODS) signed to date, 10/9/87.

TABLE 2

ROD Category (FY 87)	Duration of RIFS Studies (months)
All*	34
Federal Lead	32
State Lead	37
Federal Enforcement	31
Responsible Party	38
Region II	37
Region V	39

*RIFS data available for only 56 of the 73 RODs signed in FY 87

Source: EPA

TABLE 3

EPA Region	Percent of No Further Action Sites At Preliminary Assessment Step
I	13
II	1
III	5
IV	23
V	8
VI	80
VII	76
VIII	15
IX	51
X	38
All Regions	28
Regions I, II, III, V, VIII	7
Regions IV, VI, VII, IX, X	50

Source: Workload and Resource Requirements for Preliminary Assessments, Site Inspections and Hazardous Ranking System Evaluations Under SARA, Ecology and Environment, Inc., October, 1987.

MOBILIZING THE PRIVATE SECTOR TO INCREASE THE PACE OF THE CLEAN UP OF HAZARDOUS WASTE DISPOSAL SITES UNDER CERCLA

**Before the Subcommittee
on Superfund & Environmental
Oversight of the Senate Committee on
Environment and Public Works**

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TESTIMONY BY JAMES W. MOORMAN

My name is James Moorman. I am a member of the law firm of Cadwalader, Wickersham & Taft practicing in the District of Columbia. My principal area of practice is environmental law. Within environmental law, one of my specialties is the settlement of disputes between the Environmental Protection Agency ("EPA"), state governments and private industry regarding hazardous waste disposal sites under the clean up provisions of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA") (also referred to as "Superfund"), as amended in 1986 by the Superfund Amendments and Reauthorization Act ("SARA"). My clients in this field have included Exxon Corporation, Monsanto Company, National Gypsum Company, McKesson Corporation, Unisys Corporation and others, although I am not appearing here on their behalf. I am also the immediate past Chairman of the Environmental Law Institute, an organization I helped found in 1969 and one that has devoted substantial resources to the laws regulating hazardous waste disposal.

Prior to my joining Cadwalader in February of 1981, I was the Assistant Attorney General for Land & Natural Resources at the United States Department of Justice, a position I held during the years 1977-81. In that position, one of my concerns was the problem of abandoned hazardous waste sites. Even before the passage of CERCLA in 1980, I gave priority to the development of theories under which the government could require the clean up of such sites. I then organized the Department of Justice's section dedicated to bringing hazardous disposal site remedial suits. As the pre-CERCLA law was inadequate to deal with abandoned hazardous waste sites, I provided testimony on the proposed legislation that became CERCLA.

In the course of my practice I have developed certain insights into hazardous waste site remediation problems. In particular, I am concerned about EPA's settlement practices and policies and their deterrence of private party clean up actions. I will share those insights at this time in the hope that they will assist the Subcommittee in its Superfund oversight functions.

I. The Problem: Inadequate Pace and Number of Remediated Sites

It is my view that the overall pace and number of remediations under CERCLA is inadequate. I believe this inadequacy will continue unless EPA makes a directed effort to mobilize the private sector to take a larger role in waste site remediation. Such mobilization would require a focused and comprehensive effort on EPA's part which I will discuss in this testimony. To succeed, EPA must create a climate fostering cooperation. In addition, encouragement is needed from this Subcommittee and other key Congressional units.

The basis for my statement that the pace of Superfund clean ups is inadequate is information provided by EPA on the results of the program to date. Most recently, this information was presented on October 20, 1987, by J. Winston Porter, EPA's Assistant Administrator for Solid Waste and Emergency Response, at a conference on Superfund at Airlie House in Virginia. At this conference, Mr. Porter stated that only 29 sites listed on the CERCLA National Priorities List ("NPL") had been cleaned up to date. In light of the fact that CERCLA is now in its seventh year and there are over 800 sites on the NPL, this statistic is not very encouraging. Mr. Porter further indicated that his goal for clean up completions in the future was only 25 to 30 sites a year. While this pace would be a dramatic improvement over EPA's experience if it were actually achieved, it still is not sufficient. For example, 30 clean ups completed each year will result in only 300 sites cleaned up over the next decade. At that rate it will take approximately 30 years to clear the current NPL (802 listed sites, 149 sites proposed for listing).[1] If enough additional sites are proposed and listed to double the

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[1] See 52 Fed. Reg. 27,621 (July 22, 1987).

NPL (as many expect will happen), the process of clearing the NPL would stretch sixty years into the future.

Actually, I believe that Mr. Porter's goal of 25 to 30 completed remediations a year is optimistic. While EPA might reach this level for a time, I do not believe EPA can sustain that level of completions under the current program.

These facts, it would seem, leave the Congress and EPA with three choices: (1) accept the status quo, which is a program that will not clear the NPL, (2) greatly expand the resources in the Superfund, or (3) mobilize the private sector to increase the number and pace of site clean ups.

II. The Solution: Mobilization of the Private Sector

In my view, the third alternative, mobilizing the private sector to increase the pace and number of remediated NPL sites, is the only sensible alternative. Even if the money was available to expand the Superfund, there is a serious question as to whether EPA could manage those resources to increase significantly the number or pace of remediations.

In his October 20th presentation at Airlie House, Assistant Administrator Porter stated that of the 25-30 sites he hopes to complete annually, one-third would be remediated by the private sector. Mr. Porter said that he hoped the percentage of private party clean ups would eventually rise to one-half. This means only 8 to 10 sites a year are to be completed by the private sector each year.[2]

While it would be very difficult for EPA to increase the pace of its own clean ups, I believe the number of private party clean ups could be significantly expanded. The private sector can conduct more clean ups because it has far more project management capability than EPA will ever have. Private industry has extensive expertise in the management of project assessment, planning and execution. Many companies with project management capability want the clean up of NPL sites to proceed more rapidly so that their involvement with abandoned hazardous waste sites can be terminated. These companies are aware that EPA simply is not getting the job done. Given the proper encouragement, I believe these companies' resources could be brought to bear to a far greater extent than they have been allowed to do up to the present time. With the proper encouragement we should see a significant increase in private party clean ups. While not all companies would cooperate, enough should participate to turn the CERCLA program into a national success story.

Unfortunately, under EPA's current policies and practices, there will not be a significant increase in the number of private party clean ups. There are simply too many disincentives discouraging the private sector from taking control and managing the clean ups. For the number of private party clean ups to increase, there must be a conscious effort by EPA to encourage them.

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[2] EPA's Superfund Progress Report of July 31, 1987, sets forth statistics which confirm that the pace of CERCLA remediation is inadequate. It also confirms that the number of private party actions in the program is less than the number of fund financed clean ups. See Appendix A to this Testimony.

III. EPA has Failed to Structure Its Settlement Program to Encourage Private Remediations

Despite frequent EPA statements that the Agency wishes increased private party clean ups, EPA provides inadequate incentives for voluntary clean ups. Indeed, EPA places substantial impediments in the way of voluntary private party clean up.

An examination of EPA's settlement policies and practices indicates that the Agency fails to make the appropriate distinction between settlements in which private parties do the remediation ("clean up settlements") and settlements in which private parties merely reimburse EPA for a clean up conducted by EPA ("reimbursement settlements"). EPA officials, as a consequence, fail to grasp the relative merits of those two modes of settlement to private parties making the choice between them. EPA tends to think of private parties as deciding between settlement or nonsettlement. For most companies, nonsettlement is the worst of three choices and they concentrate on the distinction between clean up settlement as against reimbursement settlement.

The primary reason that the private sector has not conducted more Superfund clean ups is straight forward: EPA has made it more inviting to the private sector to enter into reimbursement settlements than clean up settlements. The practitioner is left with the impression that this preference is deliberate on EPA's part and that EPA is actually not very interested in encouraging private party clean ups. Indeed, the negative climate surrounding private remediation causes many companies to prefer reimbursement settlements and others to drop out of the settlement process entirely.

If EPA truly wants more clean up settlements, EPA needs to make a directed and focused effort to make clean up settlements more inviting than reimbursement settlements. The effort must attempt to foster a climate for clean up settlements, both nationally and at individual sites. In my view such an effort should be one of the Agency's very highest priorities, perhaps its highest.

IV. EPA's Conduct of the Settlement Negotiations is an Impediment to Private Clean Ups

One of the principal impediments to private party voluntary remediation is the very process of negotiating the settlement document with EPA. Before private parties may clean up a site, they must enter into a judicial consent decree with EPA.[3] The negotiation of consent decrees as conducted by EPA and the Department of Justice ("DOJ") is a very slow and laborious process. EPA often takes extended periods of time to respond to private party proposals and evidences very little flexibility in negotiations.

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[3] Prior to SARA this was a matter of policy. Now, under CERCLA Section 122(d)(1), the requirement that clean up settlements be embodied in a consent decree is imbedded in law, with one minor exception. See CERCLA Section 122(g) (exception for *de minimis* settlements). Reimbursement settlements need not be embodied in consent decrees. CERCLA Section 122(h).

This condition appears to grow out of the Agency's decision making process. Interim negotiating decisions appear to require a consensus among a large number of officials. EPA's principal negotiators, typically the most junior people on the government side, are not able to obtain the concurrences necessary to form consensus from the various offices at headquarters, in the region, at DOJ and in the relevant state government in a timely manner. Weeks and months of "dead time" regularly pass while the negotiation waits for EPA to make up its mind on one point or another. Even the setting of dates for meetings among the relevant government decision makers takes extended periods of time because of the difficulty of coordinating schedules. These delays have the effect of slowing down the pace and thwarting remediation.[4]

The extended course of settlement negotiations affects reimbursement settlements as well as clean up settlements. The consequences for the two types of settlements, however, are very different. A negotiation of reimbursement, by its very nature, does not hold up remediation. In fact, the negotiation of reimbursement may take place during clean up and the completion of negotiations may coincide with the completion of remediation.[5] On the other hand, extended negotiations are a problem for clean up settlements because the remediation action must await the completion of negotiations.

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[4] EPA has tacitly conceded that its settlement decision making process is too slow. See Interim Guidance: Streamlining the CERCLA Settlement Decision Process, February 12, 1987. This Guidance has increased awareness in the Agency of the problems of delay, but does not seem to have brought about a significant change in the overall situation of extended delays.

The leadership of the Agency has attempted to correct this problem through the use of deadlines (typically 60 days) to speed up negotiations.[6] However, because of EPA's own difficulty in making decisions, the deadlines are often ignored. If EPA believes it cannot wait for the outcome of negotiations, its principal alternative seems to be to undertake the remediation itself, rather than change its negotiating posture. This option, however, obviously defeats private party remediation. Thus, either deadlines are ignored or private party clean up becomes the victim of the deadlines.[7]

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[5] Negotiation delays can cause difficulties even with reimbursement settlements when EPA feels the pressure of a statute of limitations deadline.

[6] Congress has encouraged the use of short negotiating deadlines in SARA in the hope that this would speed up settlements. See CERCLA Section 122(e)(2). EPA has recently issued a guidance establishing procedures for the issuance of notices to trigger 60-day deadlines under Section 122(e)(2): Interim Guidance on Notice Letters, Negotiations, and Information Exchange, October 19, 1987. There is an indication in this document that EPA intends to issue Special Notices at the outset of the 30-day comment period on the selection of remedy following the issuance of feasibility studies. This practice can only result in confusion and will deter private party clean up for situations in which the private parties have not prepared the feasibility study.

As a consequence of extended negotiations, the need to move ahead with remediation frequently overruns the settlement process. When EPA is faced with the need to expedite remedial action, private remediation is usually a casualty.

EPA could do several things to minimize the delays in its conduct of the settlement negotiations. These things fall mostly in the category of "management." First, the current slow consensus approach to decision making should be scrapped. EPA should implement a system that minimizes the dead time. For example, EPA could give its negotiators authority to expedite the internal decisionmaking process. Alternatively, someone higher up in the EPA hierarchy in each region could be assigned the task of expediting government negotiating decisions (and meetings). The exact powers of expediters would need to be worked out. Whatever the exact powers are, however, the key to the expediters' success will lie in the backing they receive from the top of the Agency.

There are other approaches. Headquarters could delegate more of the settlement decisionmaking to the regions.[8]

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[7] EPA also has the option of suing the PRPs when deadlines are passed. This option, however, is costly and time consuming and cannot, by its very nature, increase the pace and scope of private party clean ups.

[8] Oddly, some regions seem to assume more authority than others and negotiate more flexibly and expeditiously than others.

Another possibility would be for EPA to establish a fast track negotiation program for clean up settlements. When the private parties indicate a willingness to undertake the clean up of a site, negotiations for that site should go in the fast track program. There are several ways to design a fast track negotiation program, but I believe it would be most successful if it involved officials more senior than normally assigned to settlement negotiations.

Efforts to speed up negotiations should begin early in the process. EPA could, for example, devote more effort at the very beginning of the process to helping the private parties coalesce. EPA should revive the practice, which seems to have fallen into disuse, of conducting meetings at the outset for all identified potentially responsible parties ("PRPs"). At such meetings, EPA could give a big boost to negotiations were it to make a neutral third party available for use by the private sector to assist in information gathering and exchange, communications, coalescence and allocation.

V. EPA's Clean Up Settlement Document Is Onerous and Cumbersome

A typical clean up consent decree is a 50 page document of about thirty-five sections, not counting attachments. A copy of a typical table of contents of a clean up consent decree is attached as Appendix B to this testimony. In comparison, a reimbursement consent decree is a far simpler document of about 8 or 10 pages.

Each of the many clauses in a clean up consent decree is drafted by industrious government attorneys, whose goal is to maximize the protection of the United States, rather than to facilitate clean up. There are dangers and problems for the private party sprinkled throughout these documents. Many of the provisions insisted upon are unnecessary and unreasonable. Most could be eliminated or moderated with no adverse effect for EPA or the clean up to be effectuated.

The changes that a competent industry attorney would seek, and which good lawyers do seek in these documents, are numerous. Because the EPA negotiator feels as though he has little discretion to vary the document, and then only after developing a consensus of numerous other officials, the elaborate settlement document slows negotiation and deters settlement.

EPA and DOJ need to develop confidence in a simpler and more evenhanded document. The current document typically advanced is simply too one-sided and EPA is too reluctant to modify it. How can a change for the better be achieved? EPA must want to encourage more private clean ups. Were EPA actually interested in achieving a higher level of private participation, it would quickly find that it could live with a document which is less onerous for the PRPs.

Referring to the table of contents of the typical clean up settlement agreement set forth as Apendix B to this testimony, the following clauses are typically drafted by EPA in a form that is unnecessarily onerous for the private parties: Paragraphs II, Binding Effect; V, Definitions; VI, Obligations for Remedial Action; VII, Work to be Performed; VIII, Reporting and Approvals/Disapprovals; XIII, Site Access; XIV, Insurance/Financial Responsibility; XV, Trust Fund; XVII, Submission of Documents; Sampling and Analysis; XXIII, Covenant Not to Sue; XXV, Stipulated Penalties; XXVI, Force Majeure; and XXVII, Dispute Resolution. Some of these clauses are unnecessary and could be eliminated. All could be simplified and made far more equitable to the private parties.

VI. EPA's Settlement Policies are Far too Elaborate and Rigid

EPA developed its method of operation under the Clean Air and Clean Water Acts in the 1970s. Under those Acts, EPA became an agency that wrote and implemented regulations. EPA's headquarters in Washington wrote the regulations and the regional offices, state agencies, and private industry were and are expected to comply with the regulations.

CERCLA, as originally passed in 1980, deviated so greatly from the Clean Air and Clean Water Act models that the Agency had great difficulty in coming to grips with the Act. The original, or pre-SARA, CERCLA gave the Agency very broad discretion and extensive powers to carry out settlements and remediations as it chose on an ad hoc, site-by-site basis. The Agency, however, was not comfortable with this situation and failed to develop the management techniques necessary to tailor settlements and remediations on a site-by-site basis. In addition, certain unfortunate developments in CERCLA's start-up phase shook confidence in the Agency's exercise of its discretion.

The result was a retreat from discretion into guidance. EPA Headquarters has now promulgated numerous elaborate guidances for almost everything in CERCLA, including various aspects of settlement. Although not formal regulations, the guidances are analogous to regulations and EPA expects them to be followed, as it expects its regulations to be followed, without variation.

Ever mindful that the CERCLA program is constantly scrutinized by the Congress, the press, and citizen groups, the Agency is naturally conservative in its drafting of the guidances. The guidances are thus crafted to minimize criticism rather than to reflect a practical approach to problems. Despite their impractical cast, regional personnel feel they have no leeway to vary from guidances in any significant degree.[9] As a consequence, the policy guidances and their writing have become a substitute for practical and effective action.

To cite one example, I refer to the de minimis party problem. Typically a large number of the parties in a multi-party site each contributed insignificant or "de minimis" amounts of waste to the site. They individually generate a very small percentage of the overall volume of waste deposited at the site.

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[9] Oddly, although each region is rigid in its interpretation of guidances, the interpretations of guidances vary from region to region.

The presence of de minimis parties creates a barrier to settlement because it clogs the negotiation process and raises transaction costs. The presence of the de minimis parties is a nuisance to the Agency, making unmanageable the number of parties to be dealt with. It is likewise a headache for the private parties with a more substantial role at the site for the same reason. For the de minimis companies themselves, their presence in a site requires that they expend transaction costs that will easily exceed their eventual liability by several orders of magnitude. As companies typically are involved in more than one site, their presence in a de minimis capacity in several sites greatly increases their overall transaction costs and dilutes their management resources, detracting time and resources from sites where the companies' presence is more significant.

The answer to this problem is an early de minimis buy-out settlement in which the de minimis parties pay a premium and obtain a full covenant not to sue in return. This solution was recognized by Congress in the enactment of SARA. *See* CERCLA Section 122(g). However, we still do not have any significant number of de minimis settlements because the Agency has spent its time crafting and implementing a de minimis settlement guidance rather than effectively settling out de minimis parties.

The guidance in question, *Interim Guidance on Settlements with De Minimis Waste Contributors Under Section 122(g) of SARA,* 52 Fed. Reg. 24,333 (June 30, 1987) takes up 7 pages and 17 columns of the *Federal Register*. It is a document that can only be read by a regional attorney as a caution to move slowly. A reading of this guidance will provide an understanding of why there are virtually no *de minimis* settlements.

The guidance:

- calls for one, big comprehensive *de minimis* settlement at each site with all *de minimis* parties;
- calls for *de minimis* parties to organize themselves to make offers and negotiate;
- requires the regions to weigh numerous imponderables before making an early settlement;
- requires several "reopeners" to take guard against various contingencies;
- discourages settlements before the RI/FS and ROD are issued;
- requires the omission of natural resources damages from the settlement;
- provides for "partial" *de minimis* settlements;
- provides for adjustment factors on a volumetric settlement;
- provides numerous nuances for consideration in the calculation of any premium; and
- requires approval in EPA Headquarters by *two* assistant administrators.

EPA personnel have taken this guidance very seriously, and, as a consequence, the *de minimis* settlement "pilot projects" have absorbed a great deal of time and effort. Perhaps for this reason, EPA has produced very few *de minimis* settlements. Given that the barriers to settlement are built into the *de minimis* procedures themselves, there is no reason to believe that the pace of *de minimis* settlements will accelerate upon completion of the "pilot projects."

It is, of course, self-defeating for the Agency to devise elaborate procedures for dealing with *de minimis* settlements. As the parties involved are, by definition, *de minimis*, they ought not be required to spend much time on the problem, and the Agency should not itself devote significant resources to the resolution of *de minimis* settlements.

I propose that EPA change course radically and deal with *de minimis* settlements as follows:

1. EPA should issue a directive to the regions ordering them to offer a settlement to *de minimis* parties at all NPL sites over the next three years.

2. EPA should issue a very simple guidance providing a few rules of thumb for the *de minimis* settlements, such as the following:

a) Only parties responsible for less than 1% of the volume of hazardous substances at a site may be a party to a *de minimis* settlement;

b) *De minimis* settlements may not be provided to parties that cumulatively account for more than 20% of the volume attributable to a site;

c) De minimis settlements may take place only when viable PRPs capable of sustaining a regular settlement are available; and

d) All de minimis settlements should include a significant premium of at least 50% over the value of the de minimis companies' share of a best estimate volumetric settlement.

3. De minimis settling parties should receive the most extensive covenant not to sue permitted by CERCLA.

4. EPA should require that de minimis parties must provide the Agency with a sworn statement of a responsible officer attesting to facts indicative of a de minimis status.

5. EPA headquarters should remove itself from the de minimis settlement process. If a region mishandles the de minimis settlement process, by not implementing a program that will effectuate the directive, then headquarters should intervene to establish the regional program. Individual settlement negotiations, decisions or results, however, should not be reviewed by Headquarters. Headquarters' principal concern should be that de minimis settlements are achieved in substantial numbers, not that the individual settlements be perfect.

VII. The RI/FS Bottleneck

Under the CERCLA program, EPA requires an elaborate series of studies, known as remedial investigations and feasibility studies, or RI/FSs, prior to the inauguration of remediation. While such studies may be admirable in principle, the elaborate nature of the RI/FS process has made them a bottleneck to remediation.

It is not my purpose to critique the RI/FS process in detail. However, the process typically takes two or more years and is very expensive ($1,000,000 for an RI/FS is not uncommon). The key difficulty is that EPA does not allow any remediation, private or otherwise, to take place at an NPL site without an RI/FS. Consequently, the number of sites at which an RI/FS is completed defines the universe of sites that may be remediated. Because the Agency can manage only a limited number of RI/FSs at any one time, private sector as well as EPA remediations are impeded.

Under the current scheme, if there are to be more clean ups, there must be more completed RI/FSs.[10] As with the remediations themselves, the only way to achieve a significantly increased number of RI/FSs is to give private parties an opportunity to perform more RI/FSs and the flexibility to perform them more rapidly and more pragmatically than is now permitted.

The barriers are substantial. A private party wishing to perform an RI/FS must enter into a settlement document in the form of an administrative consent order. The RI/FS consent orders are almost as elaborate as the consent decrees required for remediation. Not unexpectedly, it can be as difficult to negotiate an RI/FS consent order as a clean up settlement consent decree. In my view, EPA is not in a hurry to expand the universe of RI/FSs much beyond the numbers mandated by SARA. EPA decides in its annual planning process how many RI/FSs it can oversee and determines which RI/FSs it prefers to do itself and which it prefers to have prepared by a state or by private parties. No interest has been seen on EPA's part to expand RI/FS work beyond the game plan once it is set.

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[10] Of course another alternative is to bypass the RI/FS process. EPA, in fact, regularly circumvents the RI/FS process by using its "removal" authority to do much of its actual clean up work.

The reason for EPA's apparent inability to increase the number of RI/FSs underway is the amount of managerial resources EPA can devote to RI/FSs. Even when PRPs are allowed to undertake an RI/FS, the Agency micro-manages the process. Consent orders require EPA involvement and review every step of the way. Thus, EPA insists that its own managerial resource sets the limit on all RI/FSs, whether done by EPA or a private party.

EPA could do several things to ameliorate this situation. First, EPA must decide that it wants to expand the RI/FS universe and that it wants the private sector to assist in that task. It should then develop a program to encourage more private party RI/FSs and to speed them along.

One way to encourage private party RI/FSs would be to shorten the consent order to a simple two page document with a brief description of the work attached.

EPA should also end the micro-management of the RI/FS process.[11] This would greatly reduce the time required to produce an RI/FS.[12]

EPA has justified its micro-management by expressing the fear that unmanaged private parties will do a poor job in preparing RI/FSs. EPA, however, can always take over from a party that performs inadequately. Given the current protracted delays in the completion of RI/FSs, it seems that little would be lost by giving the private companies a chance to do it their way.

VIII. Recalcitrant Shares

One of the most significant barriers to private party remediations is the problem of the "recalcitrant shares," or those companies that will not voluntarily participate in a clean up. The parties that wish to conduct the remedy are then faced with paying for the recalcitrants' shares and seeking reimbursement from them through a suit for contribution.

This is a very unsatisfactory state of affairs, principally because the contribution remedy is inadequate. While SARA clarified that a right to contribution is available (see CERCLA Section 113(f)(1)), the rules governing contribution actions were left to be worked out by the federal courts on a case-by-case basis.

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[11] Obviously some oversight is desirable and appears to be mandated by CERCLA Section 104(a)(1). However, Section 104(a)(1) gives EPA broad discretion as to the intensity of its oversight.

[12] There is some indication that EPA has increased the number of RI/FS starts, including those conducted by private parties. The time to complete the RI/FS, however, seems to be stretching out so that two, three or four years to complete an RI/FS is not uncommon.

The number of pitfalls in contribution actions are great and the private sector is very reluctant to take on the task of developing the rules of contribution through the time consuming, case-by-case method. As an example, a district court in one case held that contribution defendants are not jointly and severally liable to contribution plaintiffs. See United States v. Conservation Chemical Co., 619 F. Supp. 162, 176 (W.D. Mo. 1985). The consequence of this ruling, were it to become the prevailing rule of law, would be that settling parties, in their dealings with recalcitrants, would be deprived of the principal tool available to EPA to force private parties to the bargaining table.[13]

Moreover, the transactional and organizational difficulties in managing a contribution lawsuit against recalcitrants can be substantial, even if a right to recovery seems clear cut. Companies will be reluctant to settle with the government only to have to turn around and embroil themselves in a contribution lawsuit against recalcitrants.

EPA could do at least two things to solve the problem of recalcitrants. First, EPA could pursue recalcitrants with vigor, either by suit, or through the vehicle of unilateral administrative orders. Correctly or incorrectly, it is now perceived that EPA is not pursuing recalcitrants. Furthermore, when settlements are sabotaged by a few uncooperative parties, EPA's subsequent enforcement litigation does not appear to distinguish between the cooperative and the uncooperative parties. While no program can reduce the number of uncooperative parties to zero, a vigorous, well publicized program against recalcitrants should greatly reduce their number.

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[13] Congress should spell out the rules on contribution in some future amendment to CERCLA. Such an amendment, in order to be useful, must make it so that recalcitrants can not easily escape contribution to the settlors.

Second, EPA could broaden the use of mixed funding. Mixed funding is the extremely important SARA innovation under which EPA can pay for part of a private party clean up. See CERCLA Section 122(b). The best use of this provision is to allow EPA to pay for the recalcitrant shares of a clean up settlement. EPA would then follow up with a suit for reimbursement against the recalcitrants.

While the mixed funding provision provides EPA with a significant opportunity to encourage clean up settlements, it does not appear that EPA is grasping the opportunity. Although EPA has used the mixed funding device, EPA does not plan to make extensive use of it. Mixed funding thus appears to be a tool that will be used in only 2 or 3 sites a year.[14] Furthermore, EPA has made the process of obtaining mixed funding very complex and time consuming. In essence, EPA first takes months to make a mixed funding decision, then requires the PRPs to make an elaborate filing for Superfund reimbursement, called a "preauthorization."[15]

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[14] Only three mixed fundings have been approved to date. See Inside EPA, p. 10 (November 27, 1987).

EPA should make liberal use of mixed funding as part of a strategy for mobilizing the private sector in a cooperative effort to remediate the backlog of NPL sites. In order to achieve this expanded use of mixed funding, EPA will need to make the process of arranging a mixed funding simpler. Thus, EPA will need to greatly reduce the red tape of "preauthorization." Also, EPA should make more use of the "mixed-work" type of settlement for which EPA does not require preauthorization.

IX. Stipulated Penalties

SARA requires EPA to include stipulated penalties for violations in each consent decree of up to $25,000 a day. See CERCLA Section 121(e). As administered by EPA, this stipulated penalty provision represents a flashing red light to private parties warning them to stay away from clean up settlements.[16]

The stipulated penalties sought by EPA to be included in clean up settlements are onerous in size and apply to multiple mileposts during clean up. They have the potential for cascading and can add up to a very large penalty in a short time period.

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[15] EPA acknowledges in its October 20, 1987 Guidance on Evaluating Mixed Funding Settlements Under CERCLA, at page 9, that preauthorization makes mixed funding too burdensome for use with regard to RI/FSs or removals, or matters with "short timeframes."

[16] EPA has recently issued its Guidance on the Use of Stipulated Penalties in Hazardous Waste Consent Decrees, September 21, 1987. The Guidance evidences no awareness whatever that stipulated penalties are a major deterrent to private party remediations.

The clean up process is so difficult, cumbersome and time consuming, and so fraught with unexpected problems and delays, that the risk of being assessed with the penalties is very high. Under such circumstances, prudence dictates the avoidance of a clean up settlement.

Moreover, onerous stipulated penalty provisions communicate distrust and a punitive attitude. While this factor may not seem significant, EPA fails to consider that the cadre within America's corporations who are dedicated to cleaning up NPL sites are not the people who caused the contamination of those sites. Furthermore, they are people who are highly skilled and highly motivated. They are the type of people who thrive on positive reinforcement. They do not respond well to negative reinforcement and they have a very high ability to avoid situations where they are not appreciated.

If EPA wants private sector cooperation, EPA should accept nominal or minor stipulated penalties, the minimum necessary to satisfy the requirements of CERCLA. I do not believe Congress should object to this proposal if it were implemented in the context of a program to mobilize the private sector to increase the scope and number of private party clean ups.

EPA could also structure stipulated penalties to give special incentives for good performance. Thus, EPA could give credits for compliance, and for work completed ahead of schedule in the stipulated penalty context, and should give companies an opportunity to "catch up," and thereby void penalties previously accruing.

X. Dispute Resolution Provisions

The dispute resolution provision offered by EPA in clean up settlements is inadequate. The typical clause amounts to nothing more than an agreement by EPA to take a second, informal, look at any issue in dispute for thirty days. While an appeal to the court is allowed, deadlines are not postponed by the appeal. Furthermore, the private parties are required to accept an unreasonably onerous burden of proof in all disputes before the court.[17] Most private parties do not have confidence in such an arrangement and desire to have disputes referred to a third party. The inadequacy of the dispute resolution mechanism compounds problems with other clauses, such as the stipulated penalty provisions. Thus, if there is a dispute as to whether a penalty should be assessed, the private sector believes very strongly that the dispute should be referred to a third party.

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[17] The private party generally must (1) show its proposal is "more appropriate" to fulfill the Consent Decree, (2) demonstrate that its proposal (i) is not inconsistent with the National Contingency Plan, (ii) will abate hazards at the site and (iii) will protect public health, welfare and the environment and (3) prove that EPA's interpretation is arbitrary and capricious.

One alternative is to allow judges to resolve disputes without the ludicrous burden of proof provision now insisted upon by EPA. Since the settlements must be in the form of consent decrees, this would appear to be a natural way to resolve disputes.

I understand that EPA is afraid of the court as the dispute resolver because of a bad experience it has had in at least one case. In the case in question, the private parties and EPA fell into a pattern of contention and virtually every EPA decision was taken by the private parties to the judge. I am not acquainted with the details of the situation in question, but I believe such a contentious situation could arise whenever EPA micro-manages a private party remediation.

The resolution of the problem is for EPA to eschew the micro-management of clean up settlements. If there are to be a significant number of private party clean ups, EPA has no choice in any event but to draw back from micro-management, and take a turn-key approach. The effect of such an approach would be to restrict potential disputes to a very few major issues. If a site is not cleaned up to EPA's satisfaction, and the private parties disagree, a dispute is then presented which is worthy of submission to a court.

If EPA insists on micro-management of private party remediations, disputes will surely arise and they will need to be resolved. It is possible to find a less formal alternative than the federal court, but reference to a neutral third party, in lieu of EPA officials with a vested interest in the decision, is the only satisfactory way to resolve such disputes.[18]

XI. Cost Incentives

The costs associated with the clean up of an NPL site are very significant. In October of 1984, EPA estimated the average cost of remediation at $7.2 million, with total expenditures per site running another $5.3 milion, for a total of $12.5 million per site. I have seen no EPA cost estimates since that time, but there is universal agreement that costs have risen substantially.

These high costs represent a serious restraint on the remediation of NPL sites and merit special attention by the appropriate Congressional bodies. Regardless of the reasons for the high costs, the fact of the high costs means that EPA cannot clean up all the sites on the NPL without help from the private sector.

Because the costs are so high, a significant incentive could be created for the private sector to conduct voluntary clean ups if private companies could thereby achieve significant reductions of the cost that EPA would otherwise incur and pass on to them in a reimbursement settlement. As it now stands, there are no identifiable savings to the private sector resulting from a private party remediation. And, because the cost savings of private clean ups are uncertain or insignificant, private parties are content to let EPA conduct the clean ups. Thus, a key component to any program to mobilize the private sector should be significant and identifiable cost saving incentives for voluntary clean ups.

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[18] EPA issued its Final Guidance on Use of Alternative Dispute Resolution Techniques in Enforcement Actions on August 14, 1987. The Guidance has much to say on the subject of neutral third parties. However, the Guidance does not actually contemplate the use of ADR techniques for disputes in carrying out private party remediations. An adoption of reasonable ADR techniques to clean up settlements would be useful in relieving the anxieties of private parties wishing to undertake clean ups and would foster clean up settlements.

One significant way to allow the private companies to achieve cost savings in the clean up of NPL sites is to allow them more flexibility in the selection of the remedy. This is not to say that the sites should not be cleaned up to the appropriate standards, or that the local community should not have a strong input into the remedy solution process. However, the remedy selected through the RI/FS and embodied in a Record of Decision should not be considered a tablet chiseled in stone. Furthermore, EPA's current posture that it will not negotiate the remedy should be discarded. Many individuals in the private sector believe they can get the results desired by EPA less expensively and more quickly by doing it "their way." They should be given the chance to produce. If they fail, their errors can be corrected, but society should not be deprived of the opportunity to see if they can succeed.

XII. Covenants Not To Sue

One of the principal incentives for the settlement of CERCLA disputes with EPA is the covenant not to sue that the United States provides to the settlors. SARA provided EPA with extensive guidance on the covenants not to sue. See CERCLA Section 122(f). There is general unhappiness, however, that EPA is construing the language of Section 122(f) far too narrowly. With regard to private party clean ups, the problem is at its worst and it appears that clean up settlements receive a less favorable convenant than do reimbursement settlements.

Without question, one of the best ways to encourage private clean ups would be to improve the covenants available in clean up settlements. For example, EPA could provide the parties that perform a clean up with an opportunity to escape "reopeners." Congress provided the potential for this approach in CERCLA Section 122(f)(6). Under Section 122(f)(6)(A), construed with Section 122(f)(2)(B), EPA can make certain determinations regarding a treatment that destroys, eliminates or permanently immobilizes hazardous constituents. Once the determination is made, the settlors are entitled to a special covenant that is not subject to reopeners. Another CERCLA provision, Section 122(f)(6)(B), allows EPA, after assessing a whole range of factors, to eliminate the reopeners from the covenant if EPA believes its settlement agreement is sufficient "to provide all reasonable assurances that public health and the environment will be protected from any future releases at or from the facility." It appears, however, that EPA plans to use these "Special Covenants" sparingly if at all.

There are other ways to improve the covenants not to sue so as to encourage clean up settlements. Section 122(f)(1) provides that covenants may cover remedial action off site. EPA, however, refuses to grant such releases for off-site treatment as a matter of policy. Changing this policy for the clean up settlements would clearly encourage clean up settlements.

Again, EPA has carried forward a reopener from its former settlement policy not included by Congress in Section 122(f). Section 122(f)(6) includes a reopener for future liability resulting from "conditions that were unknown" at the time EPA certifies the remedy is completed. By policy, EPA is including a reopener for occasions in which it receives new information, after the remedial action is completed, that the remedial action is inadequately protective of human health or the environment. Such a reopener is not required by Section 122(f), but has been carried over from EPA's pre-SARA policy. The elimination of this second reopener for private clean ups is another step EPA could take to improve the covenant not to sue for the private party clean up.[19]

---

[19] EPA bases this reopener on its discretionary authority under CERCLA Section 122(f)(6)(C). EPA admits that "SARA does not explicitly require this reopener." See Supplementary Information to Guidance Memorandum on Covenants Not to Sue Under SARA, 52 Fed. Reg. 28,038-9, (July 27, 1987).

XIII. The Overall Need to Balance Extensive and Intensive Clean Up Requirements

It would be a mistake if I failed to make one particular point which I believe is crucial. There can be no question that there is a relationship between the intensiveness of the clean up at particular sites and the number of sites that can be cleaned up. The more rigorous the individual clean ups and the more stringent the clean up requirements imposed, then the more time and money required to clean up any specific site. The more resources required per site, the fewer sites that can be cleaned up with the resources available.

.Clearly the public wants the NPL sites cleaned up as quickly as possible. The CERCLA system, however, is devoting very large resources to each site addressed, causing the process to move very slowly. Obviously a new balance needs to be struck between expeditiousness and intensiveness. The ideal is a program that will clean up sites to a reasonable degree and dispatch the clean ups in a reasonable period of time at a reasonable cost.

At this point in time the program is being driven by the extremely confusing "ARARS" standards setting approach toward ever more costly, intensive clean ups. The consequence is a program that is not completing very many remediations and that is not likely to complete many in the foreseeable future. This will be true whether or not EPA is successful in encouraging more participation from the private sector.

An alternative which should work more efficiently would be straight forward, across-the-board standard setting by media for NPL sites. Standard setting is what EPA does regularly under other programs. The abandoned hazardous waste sites represent a special environment with their own unique problems deserving of their own standards. The ARARS process, by attempting to apply other programs' standards to the NPL sites, has caused extensive delays, confusion and unnecessary cost overruns.

XIV. Conclusion

There appears to be much lip service at EPA to the idea that the private sector should be encouraged to remediate more NPL sites than currently. There also appears to be a very serious need to so encourage the private sector. Otherwise, at the current pace of remediation, none of us here are likely to live to see the NPL cleared.

Despite the general acceptance of the idea of private sector participation, not much is being done to encourage it. EPA simply has not established a program designed to encourage a significant number of private party clean ups.

Private party clean ups are not inherently easy to arrange, especially at multi-party sites. At multi-party sites, clean ups must be arranged by a PRP "Steering Committee." The Steering Committee is made up of volunteers from various companies. It has no permanent staff and very few resources. It must raise funds, hire consultants, allocate costs, gather and distribute information, negotiate with EPA, develop a consensus, provide management, and resolve issues. It must do all this while impeded by an EPA bureaucracy that has little flexibility and a very slow response rate.

Currently, the Steering Committees are being asked to take over clean ups in a context in which there appears to be no cost savings, an inadequate covenant not to sue, a risk of severe penalties and a host of other negatives.

If EPA seriously wants private party clean ups in increased numbers, it must change this context. To make this change, it must create a program that is inviting to the private sector. This program must eliminate barriers and provide incentives.

The ball is in the Agency's court.

APPENDIX A

Data from EPA's Superfund Progress Report as of July 31, 1987

(Data for NPL sites only)

Item 10 - Sites With Response Activity

	F.Y. To Date	Program To Date
Fund Financed	37	359
PRP Financed	16	94
Both	10	138
Federal	0	5
Total	63	596

Item 13 - Sites With Removal Activity Starts

Fund Financed	9	173
PRP Financed	6	50
Both	2	24
Total	17	247

Item 14 - Sites Where Removal Activities Are Completed

Fund Financed	16	163
PRP Financed	1	30
Both	0	16
Total	17	209

Item 15 - Sites With RI/FS Activity Starts

Fund Financed	51	404
PRP Financed	25	73
Both	4	69
Total	80	551

	F.Y. To Date	Program To Date
Item 17 - Sites With Design Activity		
Fund Financed	49	117
PRP Financed	2	44
Both	0	2
Total	51	164
Item 18 - Sites With Remedies Implemented		
Fund Financed	16	58
PRP Financed	11	56
Both	1	4
Federal	0	1
Fund Financed IRM	0	30
PRP Financed IRM	0	20
Total	28	169
Item 25 - Sites Cleaned Up Through Removal Action		
Fund Financed	2	21
PRP Financed	0	0
Total	2	21
Item 26 - NPL Sites Cleaned Up		
Total	0	14
Item 27 - Sites Deleted From NPL		
Total	0	13

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Testimony of
NATURAL RESOURCES DEFENSE COUNCIL
on
Superfund Enforcement
before the
Senate Committee on Environment and Public Works
Subcommittee on Superfund and Environmental Oversight

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December 10, 1987

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Introduction

The Natural Resources Defense Council ("NRDC") appreciates this opportunity to testify about Superfund enforcement issues. NRDC is a national, non-profit environmental organization supported by more than 70,000 members and contributors. The organization worked for passage of the Superfund Amendments and Reauthorization Act of 1986 ("SARA") and is actively monitoring its implementation by the Environmental Protection Agency ("EPA"). NRDC previously testified before this Subcommittee on June 25, 1987 on the subject of EPA's implementation of the cleanup standards requirements of §121 of SARA.

The SARA amendments have now been in effect for one year. Although it is too early to draw firm conclusions about EPA's implementation, NRDC has questions about the direction and vigor of the Agency's efforts so far -- particularly in the area of enforcement. We worked to preserve the strict joint and several liability standard during the reauthorization and strongly supported enactment of stringent cleanup standards, citizen suit provisions, statutory opportunities for public participation in remedy selection (including technical assistance grants), and strict schedules for EPA commencement of Remedial Investigation/Feasibility Studies and remedial actions at National Priority List ("NPL") sites. In many respects, the ink is barely dry on these provisions and we would like them to be given a chance to work. In this effort, a strong and credible EPA enforcement presence is essential to promote settlements, provide compelling incentives for PRP cleanups, and deny recalcitrant PRPs the benefits of their unwillingness to cooperate.

Unfortunately, we have recently become aware of the creation of a well-organized coalition of petroleum, chemical, electronics and insurance companies which has already begun a four-year campaign to prove that the Superfund statute is fatally flawed and requires major amendment in 1991. This coalition is particularly targeting the present liability standard which it blames for all the shortcomings it sees in the current federal cleanup program. NRDC is especially concerned because, by prejudging the effectiveness of the SARA amendments, this effort may become a self-fulfilling prophesy which will prevent the law from functioning effectively.

Most disturbing, this coalition is apparently being led by former EPA Administrator William Ruckelshaus, one of the leading environmentalists in the United States. Although we recognize that the affected industries have every right to organize an effort to win in 1991 the battle against strict, joint and several liability that they fought and lost in 1986, we greatly regret that Mr. Ruckelshaus is willing to lend his name, reputation, and considerable energy to accomplishing these questionable objectives. We would have preferred to see his name among those willing to give the 1986 amendments a chance to work. (The "blueprint" for the coalition's research and public relations campaign is appended.)

The Enforcement Tools Provided by Congress

During the debate over the reauthorization of Superfund, Senator Stafford explained that the standard of liability applicable to Superfund cleanups is strict, joint and several and that "[e]arlier versions of the legislation... contained explicit restatements of this underlying liability [standard]. Such provisions were deleted from SARA because they are unnecessary given the clear and correct body of case law that has confirmed and developed the doctrine of strict, joint and several liability under Superfund...." 132 Cong. Rec. S14903 (statement of Sen. Stafford). Similarly, during the House debate over SARA, Representative Dingell underscored that "[n]othing in this legislation is intended to change the application of the uniform Federal rule of joint and several liability...." 132 Cong. Rec. H9563 (Oct. 8, 1986) (statement of Rep. Dingell).

The joint and several liability standard is the most important enforcement tool provided by the Superfund statute. This is the case because

> Joint and several liability... shifts the burden of pursuing recalcitrants from the Government to other potentially responsible parties. The theory underlying Superfund's liability scheme was, and is, that the Government should obtain the full costs of cleanup from those it targets for enforcement, and leave remaining costs to be recovered in private contribution actions between settling and nonsettling parties.

132 Cong. Rec. S14903 (statement of Sen. Stafford).

This system was built into the statute to expedite the cleanup of the thousands of hazardous waste sites around the country which currently pose risks to health and the environment. By shifting the burden of pursuing recalcitrants from EPA to potentially responsible parties ("PRPs"), this scheme greatly reduces the number of legal actions EPA must bring to clean up a hazardous waste site. This allows the Agency to clean up sites much faster than it could otherwise.

Congress further limited delay by requiring that PRP lawsuits challenging EPA chosen remedial actions may only be brought after the remedial action (or the phase of the remedy addressed by the lawsuit) has been taken. 42 U.S.C. §9613(h).

Another statutory enforcement tool can be found in §106 of SARA. This section allows the Agency to issue unilateral administrative orders in cases of "imminent and substantial endangerment to the public health" (although settlements in which PRPs agree to perform remedial actions, i.e., cleanup settlements, require use of judicial consent orders). Under this provision, EPA can order PRPs to pay EPA cleanup costs -- or order PRPs to conduct the cleanup themselves. Such orders can only be challenged in court if EPA brings an enforcement action alleging that the order has been violated; if an administrative order is violated, the violator risks fines of up to $25,000 per day, §106(b)(1), and/or treble punitive damages, §107(c)(3). Further, PRPs face a heavy burden in an EPA enforcement action because they are limited to the administrative record developed by EPA, §113(j)(1), and EPA's actions can only be overturned if shown to be "arbitrary and capricious," §113(j)(2). Thus, EPA has been provided with a variety of enforcement "sticks" with which to persuade PRPs to participate actively in achieving the ambitious cleanup goals of Superfund.

The New Settlement Provisions

The SARA amendments also contain new provisions which EPA can use to facilitate settlements when doing so will expedite cleanup. As originally written, the Superfund statute was silent as to when EPA could reach settlements with PRPs, and how much flexibility the Agency had, if any, to "sweeten" settlement offers in order to entice PRPs to the table. SARA clarifies the situation by providing the Agency with settlement guidelines.

Settlements in which PRPs agree to perform remedial actions must involve parties EPA has determined will "properly" carry out the remedial action; settlements can only be entered into when "practicable and in the public interest;" and settlements must be "consistent with the National Contingency Plan" ("NCP"), the set of administrative regulations through which EPA must implement the terms of the Superfund statute -- including the tough cleanup standards specified in SARA. 42 U.S.C. §9622(a).

These guidelines were legislated because, during Anne Burford's term as Administrator, EPA abused the discretion the original Superfund statute had allowed it. However, it is very clear that the settlement provisions were not intended to be a substitute for a tough EPA enforcement posture. As Senator

Mitchell explained, under the amendments, EPA is to balance settlement and enforcement:

> This bill establishes the framework in which EPA can negotiate tough settlements with PRPs in the interest of cleaning up a site more quickly. The settlements provision is not a carte blanche for the agency to cease enforcement activity and to agree to any offers by PRPs.
>
> Section 122, to the contrary, envisions an agency that uses all of its enforcement tools.... I cannot stress too strongly my view that this section is designed only to provide settlement guidance to the Agency. The purpose is to clarify the limited circumstances in which settlements are appropriate; the purpose is not to encourage EPA to settle as many cases as possible.

132 Cong. Rec S14918 (Oct. 3, 1986) (statement of Sen. Mitchell) (emphasis added).

These new settlement provisions, however, do not and were not intended to affect Superfund's strict, joint and several liability standard. As Senator Stafford clearly explained:

> The importance of placing the settlement procedures established under §122 in the context of Superfund's liability scheme cannot be overstated. Settlements are an alternative to full prosecution of strictly, jointly and severally liable parties and must always be evaluated in relation to the relief the Government could have obtained by litigating the case.
>
> * * *
>
> Under a liability scheme as rigorous as that of Superfund, recoveries of amounts less than full costs are disfavored and are justified by only extraordinary circumstance.

132 Cong. Rec. S14903 (Oct. 3, 1986)(statement of Sen. Stafford).

The legislative history of SARA contains repeated statements that §122 in no way compromises the tough Superfund liability standard and that settlements are not to be pursued at the expense of EPA enforcement activity. As NRDC reads the statute and the legislative history, EPA is directed not to enter into a settlement unless it would achieve a result equivalent or superior to what a vigorous enforcement action would achieve.

The Enforcement Problem

In hearings held during the reauthorization process, EPA Administator Lee Thomas made specific promises about how the Agency would enforce the statute.

> ... [T]he enforcement component of Superfund is a very important component of Superfund. It's the component that allows us to litigate or settle with parties for cleanup as opposed to going all the way through cleanup and through some kind of a recovery process in the courts trying to recover what we spend. We would have a massive public works program without that enforcement component of up-front settlements. We think there are all kinds of disadvantages to that kind of approach.
>
> So the $2 billion I projected [EPA will recover through enforcement] may be $3 billion; it may be $1.8 billion. Thats your point I think. ....[W]e think that estimate is a good sound estimate ... if you have a very strong, aggressive enforcement program, which we intend to have.
>
> * * *
>
> We project ... that about half the sites would go to settlement. We project about half the sites will turn out with an enforcement remedy on it.

Reauthorization of Superfund: Hearings Before the Subcomm. on Commerce, Transportation, and Tourism of the House Comm. on

Energy and Commerce, 99th Cong., 1st Sess. 195 (1985). Thomas argued during reauthorization that the Superfund need contain no more than $5.3 billion because EPA's "very strong, aggressive enforcement program" would bring in close to $2 billion in actual dollars or commitments to perform cleanups, bringing the effective Superfund total up to $7.3 billion.

Thomas' predictions, that EPA would deliver a "very strong, aggressive enforcement program" and that half of all Superfund sites would be the subject of "an enforcement remedy," have so far not proved correct. In fact, recent EPA statistics indicate that during Fiscal Year 1987, SARA's first year, EPA only referred seven cases involving sites on the NPL, and eleven cases total, to the Department of Justice for §106 cleanup enforcement actions. (The statistics for all other types of enforcement actions are similarly low.) This poor showing undercuts the credibility and, thus, the future effectiveness of the Agency's enforcement efforts.

Despite these low numbers, top management at the Agency has long been aware of and continues to stress the importance of enforcement. An August 26, 1985 Memorandum from Headquarters to enforcement officials in the Regions states:

> We have had discussions with a number of you over the past several months regarding the advisability of initiating an increased number of CERCLA 106 judicial actions. The Administrator has frequently mentioned the need for a balanced enforcement program composed of both Fund-financed responses followed up by cost recovery and injunctive actions to compel private parties to perform or pay for cleanup.

Memorandum from Frederick F. Stiehl and Gene A. Lucero to Regional Counsels and Regional Waste Management Division Directors (August 26, 1985) (re: "The Role of 106 Cases the CERCLA Enforcement Program). A July 8, 1986 Memorandum, from Superfund chief J. Winston Porter to all Regional Administrators, admonishes:

> As you may know, over the past few years, virtually no new CERCLA 106 judicial actions have been brought. Although the threat of expending Superfund dollars to compel private party cleanup has been effective, an aggressive use of other enforcement sanctions, specifically 106 judicial action, is necessary in order for the Agency to meet its future goals for cleanup of hazardous waste sites.
>
> In the past, Regions have argued that 106 litigation is too lengthy, complex and resource intensive, and that the "threat of the Fund" is a much more effective incentive for privately-financed response. However, 106 judicial actions continue to present many advantages. Litigation of these cases has resulted in favorable legal precedents, thus encouraging PRPs to settle with EPA, sometimes for more extensive remedial action than could have been obtained through a Fund-financed action. Some of our largest and most significant settlements have come as a result of filing 106 actions absent the "threat of the Fund."

Memorandum from J. Winston Porter, Assistant Administrator Office of Solid Waste and Emergency Response, to Regional Administrators Regions I-X (July 8, 1986) (re: "Use of CERCLA 106 Judicial Authority - Short Term Strategy").

When these memoranda were written, before reauthorization, the Fund was in the process of running out of money. At that point, the concern that §106 actions were too resource intensive was, perhaps, a real one. SARA, which provides EPA with a replenished Fund of $8.5 billion, changes this situation.

Unfortunately, district court rulings in a few §106 cases appear to be deterring some EPA regions from actively bringing such cases. Three judges, in §106 actions filed before the 1986 Amendments were passed, ruled that there is de novo review of EPA's remedy selection in such cases, providing the very opportunity for pre-enforcement review that Congress clearly intended to preclude in SARA §113(h)(4). These decisions, arguably incorrect and likely to be overturned, should in no way bar EPA from issuing unilateral administrative cleanup orders and proceeding straight to court under §106 if the order is violated. This is the case because an action enforcing an administrative order is procedurally distinct from an action under §106. Furthermore, these opinions should only apply to suits filed before the 1986 Amendments passed.

However, if EPA does not increase its use of enforcement, the entire Superfund cleanup program may again to come to a halt. Administrator Thomas' representations about the Agency's enforcement intentions were taken seriously during the reauthorization and the level of the reauthorized Fund, $8.5 billion, was based in part on the assumption that EPA would generate significant revenues or commitments to perform cleanups via "very strong, aggressive enforcement." To the extent that EPA is not able to do this between now and the next Superfund reauthorization in 1991, the present Fund is likely to prove inadequate for the job for which Congress intended it.

This concern is a real one because the Fund is needed to cover many fixed costs such as training and overhead as well as to cover what amounts to bridge-financing at sites where EPA finances the cleanup and then sues PRPs to recover its costs. With few enforcement actions being brought, there is a risk that in the future -- especially as more sites near the most expensive stages of cleanup -- EPA will be forced to draw heavily on the Fund and, absent enforcement generated in-flows, will run out of money before 1991. And if the Fund runs out of money, Congress' desire for fast, effective cleanups will be entirely frustrated.

Increased Enforcement is the Solution

In public statements and internal memos, EPA's top management acknowledge that enforcement is critical for optimal implementation of Superfund and that settlements are most effective when coupled with an aggressive program of enforcement and Fund-financed actions. What we have seen in FY 87, however, is increasing reliance on settlements as the centerpiece of the Agency's enforcement strategy -- without the vigorous enforcement component necessary to make the system work.

There is a serious problem with pursuing such an approach. If EPA does not bring more enforcement actions, despite the requests of its top management, it could lose the option of reaching appropriate settlements with PRPs. This would occur if intelligent PRPs realize that, by refusing to negotiate settlement, they can force EPA to "go to the Fund" to pay for the large number of the expensive cleanups coming on line across the country and that the Agency -- by repeatedly having to finance these cleanups -- will run so low on money and resources that it will have a strong incentive to make inappropriate concessions on settlement terms. PRPs are increasingly pressuring EPA in settlement negotiations to relax stipulated penalties, use mixed funding frequently, accept industry-drafted generic settlement provisions, and so on. While the law provides EPA with the discretion to use such tactics where they will expedite good settlements, the Agency's ability to obtain such settlements depends upon the credibility of their enforcement posture.

Conclusion

It may well be that the problems associated with restarting the Superfund program after it ran out of funds, and the Agency's need to become familiar with the many provisions of the new amendments are the principal reasons why EPA's enforcement record over the past year has been unimpressive. EPA tells us that next year enforcement will be much more aggressive; however, actions speak louder than words. We look forward to seeing a large number of enforcement actions, especially enforcement actions which employ the Agency's authority to seek punitive and treble damages against those who violate administrative orders.

Vigorous enforcement is essential to the task of maximizing the number and quality of site cleanups accomplished. It is also necessary in light of the industry campaign discussed earlier, which is designed and intended to ensure that Superfund does not succeed. If necessary, EPA should adopt such measures as establishing enforcement action quotas along with special teams of attorneys assigned to meet those quotas within each region. If these attorneys need special training in bankruptcy law, debt collection, and pursuing recalcitrants, such training should be provided.

We believe that the basic concepts incorporated in the statute are sound and workable. We do not need a massive new public works program to clean up the mistakes of the past. We do need a convincing demonstration that EPA can and will take the requisite enforcement actions to make the Superfund program work properly.

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CORNELIUS C. SMITH, JR
VICE PRESIDENT

BY EXPRESS MAIL

July 27, 1987

To: Superfund Alternative Task Group

Re: Meeting with W.D. Ruckelshaus and Walker Associates (July 24, 1987)

As requested by the Task Group, a delegation composed of Warren Azano (Aetna), Roger Strelow (G.E.), Les Cheek (Crum & Forster) and Bud Smith (Union Carbide) met with Bill Ruckelshaus, Charls Walker and Lee Fuller at Monsanto Headquarters in St. Louis to discuss the possibility of marrying the efforts of the Task Group with those of the coalition which Ruckelshaus Associates and Walker Associates is seeking to form. Jim Senger of Monsanto was also present during most of the discussion.

Attached are copies of the agenda items addressed at the meeting and Lee Fuller's July 21 letter, with enclosures. The following is an attempt to summarize the substance of the Ruckelshaus/Walker responses to our questions on these agenda items:

1. Current Assessment and Projections - The current Superfund statute and tax/enforcement process is seriously flawed. It does not work and is not expected to work. We are spending billions of $$ for a public benefit of millions of $$. An effort must be made to revise Superfund to make it effective, efficient and equitable. Although it is possible that, as a political reality, Superfund's enforcement mechanism in some form cannot be eliminated, its effectiveness, efficiency and equity is highly questionable. They have an open mind as to what would be a reasonable and politically acceptable revision or alternative.

2. Projected Roles - Lee Fuller would be the coalition general manager. Henry Habicht (recently resigned Assistant Attorney General with Superfund responsibility) and Phil Angell of Ruckelshaus Associates would contribute substantial time to the effort. Bill Ruckelshaus and Charls Walker would contribute in the initial stages an appropriate amount of time on policy and management issues. Additional full-time staff would be added at the direction of the Executive Committee.

3. Trade Associations - Will seek to utilize and coordinate with them. Every effort will be made to gain their assistance and to avoid redundancy and conflicts. However, their lack of credibility on certain issues needs to be recognized.

4. Avoidance of Redundancy - Every effort will be made to avoid duplicative and inconsistent efforts.

5. Management - Will require three levels as per the agenda.

6. Name and Legal Status - Significant issues that must be resolved by the Executive Committee.

7. Potential Conflicts of Interest - Potential is fully recognized and every effort will be made to avoid conflicts and to maintain the coalition.

8. "How Clean is Clean?" - A critical issue that must be addressed by the coalition.

9. Avoidance of Tax Increases - Recognized as an important issue.

10. Initial Public Affairs Efforts - Matter to be decided upon by the Executive Committee.

11. Fees - $120,000 is a flat rate to be paid by the participants to Ruckelshaus/Walker Associates for 1987. Any research or outside consulting done during 1987 will result in additional charges. Willing to discuss alternative fee arrangements for 1988 and beyond.

The Task Group delegation was satisfied with the above answers and are, individually willing to recommend to their managements that their corporations be initial participants in the Ruckelshaus/Walker coalition. They are not willing at this time to recommend that our Task Group be disbanded. All of their corporations will be represented at the Ruckelshaus/Walker July 29 meeting.

Very truly yours,

CC Smith BSM

Cornelius C. Smith, Jr.

CCS,Jr./pf
Enclosures
0544P

SUPERFUND ALTERNATIVE TASK GROUP MEETING WITH WALKER ASSOCIATES AND RUCKELSHAUS ASSOCIATES
(July 24, 1987)

---

1. W.D. Ruckelshaus Current Superfund Assessment and Projections

2. Projected Roles:

   - Charls Walker Associates

     - Charls Walker
     - Lee Fuller
     - Others

   - Ruckelshaus Associates

     - Bill Ruckelshaus
     - Others

3. Relationship of Coalition to Trade Associations, e.g., CMA, APA, AIS, etc.:

   - active participation
   - funding
   - avoidance of redundancy
   - avoidance of conflicts

4. Avoidance of redundancy with other efforts, e.g., Superfund Settlement Project, Clean Sites Inc., etc.:

5. Management of the Coalition's Efforts:

   - Steering Committee
   - Working Groups
   - Full-Time Staff

6. Name and Legal Status of the Coalition

7. Potential Insurers/Insureds Conflicts of Interest

8. Handling of the "How Clean is Clean?" Issue

9. Avoidance of Increased Taxes As a Consequence of Expansion of Superfund's Scope

10. Timing of Initial Publicizing of the Coalition's Existence

11. Fees

CHARLS E. WALKER ASSOCIATES, INC.
1730 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, D.C. 20006
TELEPHONE (202) 393-4760 TELECOPIER (202) 393-5729

July 21, 1987

Mr. Cornelius C. Smith, Jr.
Union Carbide Corporation
39 Old Ridgebury Road
Danbury, CT 06817-0001

Dear Mr. Smith:

The next meeting to discuss organization of a group on Superfund reauthorization will be held on July 29, 1987, beginning at 10:00 a.m. The meeting should conclude by 12:00. It will be conducted at:

Charls Walker Associates, Inc.
Suite 200
1730 Pennsylvania Avenue, N.W.
Washington, D.C.

The purpose of this meeting will be to further examine and discuss the potential for formation of a multimember coalition to address the wide variety of issues relating to Superfund reauthorization. The documents used for the last meeting will continue to be used in the discussion at this meeting. Copies of these documents are enclosed. A primary element of the meeting will be to discuss the formation of an executive steering committee and appropriate and relevant subcommittees.

We look forward to your participation in this meeting. If you have any questions please contact me at the above address or by telephone at (202) 393-4760.

Sincerely,

Lee O. Fuller

Lee O. Fuller
Vice President

Enclosure

SUPERFUND LIABILITY GROUP

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Research Objectives

+The overall objective of this proposal is the development and passage of amendments to the existing Superfund law that will assure an effective and efficient clean up of Superfund sites under an equitable system of allocating costs.

+Research activities undertaken must be coordinated within this larger objective. Failure to maintain this research orientation could lead to lessened effectiveness and hampered credibility.

+In addition to the execution of research regarding the implementation and effects of SARA, a perspective of past actions leading to the enactment and implementation of CERCLA would be undertaken to provide a baseline reference point for analysis of the implementation of SARA.

+In general, research activities executed by this group would be designed to initiate, if possible, by the end of 1987, to have a mid-course analysis prepared by year end 1988, and to be largely completed by year end 1989. These activities would continue into the 1990/1991 timeframe to maintain accuracy of analysis. This schedule is predicated on the assumption that policy analysis of possible changes to SARA by the Administration and the Congress will begin in 1990. To be effectively used, this research needs to be essentially complete by 1990.

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Research Activities 1987

Overview

+Prior to detailed research development, a survey of current private and public sector research activities would be undertaken to determine how these other efforts might facilitate or otherwise alter potential research plans.

Transaction Costs

+Contact Environmental Protection Agency/Dept. of Justice to determine availability of transaction cost information.

+Create credible mechanisms to execute continuing review.

+Develop method to effectively assess transaction costs.

Remedial Action Process

+Track implementation of the SARA law to follow the regulatory intrepretations of the key provisions of the act which would adversely affect cost effective site clean ups

+New SARA clean up standards

+The role of states

+The role of citizen participation

+The use of litigation/enforcement to compel remedial action

+The limitation of settlements

+Create credible mechanisms to execute a continuing review.

+Develop method to monitor implementation effects at all NPL sites.

+Initiate effort to conduct a risk assessment review of the clean up standards.

+Assist group members in developing responses to Administration proposals on implementing SARA.

Technologies

+Identify aspects of remedial action policy which hinder the use of cost effective technologies.

+Create credible mechanisms to evaluate technologies.

Technologies(Cont.)

+Develop method to monitor implementation of cost effective technologies at NPL sites.

Liability/Enforcement

+Track EPA/Justice policy positions on use of joint and several liability in remedial actions.

+Track EPA/Justice policy on use of administrative orders at NPL sites.

+Locate appropriate research organization to develop an analysis of the effects of these policies on the clean up of sites. Legal academics might be utilized in this effort.

Settlement Policy

+Track EPA/Justice policy positions on use of the SARA settlement policy with particular emphasis on--

+Use of mixed funding

+Releases from liability

+Deminimis contributor cash-outs

+Non-binding allocations of responsibility

+Create credible mechanisms to analyze the effect of these policies and utilizations on the clean up of sites.

+Initiate effort to conduct an ongoing analysis of settlement policy.

Bodily Injury/Property Damage

+Initiate review of prior efforts to address the issue of handling third party claims under Superfund.

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Research Activities **1988**

Transaction Costs

+Continue comprehensive tracking of transaction costs.

+Obtain available information on transaction costs prior to SARA.

+Develop matrix to compare transaction costs before and after enactment of SARA.

+Target to prepare mid-course transaction cost analysis by year end.

Remedial Action Process

+Continue comprehensive tracking of clean ups.

+Obtain available information on site clean ups prior to SARA.

+Develop matrix to compare site clean up requirements before and after SARA.

+Broaden risk assessment review to include assessment of statistically significant number of pre-SARA sites.

+Initiate effort to compare risks before and after SARA.

+Target to prepare mid-course remedial action process analysis, including risk assessment studies, by year end.

Technologies

+Continue technology monitoring.

+Develop case study examples of sites where more cost effective technologies could have produced more efficient and effective clean up.

+Develop case study examples of hindrances to utilization of cost effective technologies.

+Target to prepare mid-course technology analysis by year end.

Liability/Enforcement

+Continue tracking of EPA/Justice policy development on liability and enforcement as methods to compel site clean up.

+Initiate study, through a credible mechanism, of the barriers to clean up actions resulting from the inequities of the liability provisions of CERCLA and SARA, utilizing as it becomes available the information developed under the Transaction Cost, Remedial Action Process, and Technologies research efforts.

+Target to prepare mid-course liability/enforcement analysis by year end.

Settlement Policy

+Continue tracking of EPA/Justice policy development on settlement policy.

+Develop case study examples of sites where effective use of the elements of an aggressive settlement policy could have promoted a more effective, efficient, and expeditious clean up.

+Utilize ongoing analysis to incorporate information developed under the Transaction Cost, Remedial Action Process, and Technologies research efforts as it applies to the use of settlement policy.

+Target to prepare mid-course settlement policy analysis by year end.

State Preemption

+Initiate study, through a credible mechanism, of the implications of state preemption on site clean up.

+Study would utilize information from Transaction Cost, Remedial Action Process, Technologies, Liability/Enforcement, Settlement Policy, and Bodily Injury/Property Damage research efforts as it becomes available.

+Research would address the implications of state preemption on the size of the clean up program, the speed of action at sites, the cost of the program, and the management implications on the Federal agencies.

Bodily Injury/Property Damage

+Initiate review of bodily injury and property damage litigation at current NPL sites.

+Review implications on bodily injury and property damage litigation of the Health-Related Authorities section of SARA.

+Target to prepare mid-course analysis of bodily injury/property damage research by year end.

Economic Implications

+Identify major economic issues to be researched including the economic implications of various fund sizes and sources on the economy generally and on those elements of the economy most affected by possible alternatives.

+Determination of factors would include information being developed under other research efforts.

+Locate credible economic analysts to undertake studies.

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Research Activities **1989**

Overview

+Major effort would be made to have completed research conclusions by year end in order to be prepared to participate in policy formulation that will likely occur in 1990 by both the Administration and Congress.

+Research, particularly tracking and case study efforts, would continue into 1990 and 1991, but effective participation will require the conclusions in order to act in 1990.

+A significant effort will be devoted to merging the results of one area of research into the ultimate results of other key areas.

+The 18 month period from mid-1988 to early 1990 will probably be the most important window of time because most implementation actions will be completed, the program should be running at full rate, and it will be the basis for most policy formulations for the next reauthorization.

Transaction Costs

+Continue comprehensive tracking of transaction costs.

+Utilize information from Remedial Action Process, Technologies, Liability/Enforcement, and Settlement Policy research to detail effects on transaction costs.

+Develop case study examples that are characteristic of transaction cost analysis: identify potential negative anecdotal examples.

+Target for year end completion.

Remedial Action Process

+Continue comprehensive tracking of clean ups.

+Target to complete analysis of site clean up problems by year end including effects of SARA requirements, comparisons of before and after requirements, and comparative risk analysis.

+Input information to Transaction Costs, Technologies, Liability/Enforcement, Settlement Policy, and State Preemption research efforts.

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Research Activities 1989

Technologies

+Continue technology monitoring

+Adjust technology research conclusions to reflect Remedial Action Process research information.

+Input information to Transaction Costs, Liability/Enforcement, Settlement Policy, and State Preemption research efforts.

+Target to complete technology analysis by year end.

Liability/Enforcement

+Continue tracking of EPA/Justice policy development on liability and enforcement.

+Utilize information from Remedial Action Process and Technologies research to enhance analysis.

+Develop solid case study examples of inequitable liability or enforcement; develop solid refutations to anecdotes on industry recalcitrance.

+Initiate effort to clearly show how liability presents open ended exposure to corporations and relation to need to defend against liability.

+Target to complete analyses by year end.

Settlement Policy

+Continue tracking of EPA/Justice policy development of settlement policy.

+Input information from Transaction Costs, Remedial Action Process, and Technologies research efforts as it applies to the use of settlement policy.

+Continue case study development.

+Target to complete analyses by year end.

State Preemption

+Target to complete study by year end

+Utilize information developed in this effort in developing conclusions in Transaction Costs, Liability/Enforcement, Settlement Policy, and Economic Implications research efforts.

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Research Activities **1989**

Bodily Injury/Property Damage

+Merge prior efforts into research to détermine implications of addressing bodily injury and property damage through modifications of Federal law.

+Input information from Transaction Costs, Liability/Enforcement, and Settlement Policy efforts.

+Utilize information in Transaction Costs, Liability/Enforcement, Settlement Policy, and Economic Implications efforts.

+Target for completion of efforts by year end.

Economic Implications

+Input information from Transaction Costs, Remedial Action Process, Technologies, Liability/Enforcement, Settlement Policy, State Preemption, and Bodily Injury/Property Damage research efforts to analysis.

+Target completion of tentative analysis by year end.

+Target completion of total effort by mid 1990.

+Retain capability to revise economic analysis until reauthorization is completed.

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Research Activities **1990/1991**

Summary of Approach

+Research effort capabilities would be retained in all areas.

+Tracking of program would continue.

+Research results would be completed if delayed and would be modified if tracking effort indicated the presence of information that would suggest the prior conclusions were incorrect or inadequately supported.

+Additional research would be conducted in response to policy development actions in the Administration and Congress

+Additional research would be conducted in response to challenges of results or to respond to allegations regarding the Superfund program with which earlier research efforts would disagree.

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SUPERFUND LIABILITY GROUP PROPOSAL

I. Background.

Statutory liability under the Federal "Superfund" law is, perhaps, the most sweeping in the Federal court system. The law creates a strict liability standard which is interpreted as joint and several as well. Any single contributor (or its insurer) to an abandoned waste site can be held liable for the total cost of clean up. The Federal government is the plaintiff and can bring the full resources of the central government to bear on any potentially responsible party (PRP). In addition, the government can order any PRP to clean up a site and failure to act can result in treble damages.

New amendments to the Superfund law - adopted in 1986 - have created uncertain and potentially, significant changes.

(1) Statutory requirements to define more rigorous and less judgmental cleanup standards will increase the costs of cleanup.

(2) States are given a more defined and critical role in selecting cleanup remedies. This role will further increase costs. State standards can be more restrictive, and thus more costly, than Federal standards. They can be required if the Environmental Protection Agency (EPA) agrees, if a Federal court determines they are appropriate, or if a State agrees to pay the difference in costs. These added costs can be in turn extracted from PRP's.

(3) Provisions for citizen suits as a part of the Superfund law or under the Solid Waste Disposal Act can result in further delays and increased costs of cleanup.

(4) Requirements for public participation in the selection of cleanup remedies are made explicit and Federal funds are provided. These efforts could both delay development of cleanup solutions and encourage citizen suits.

(5) Although new provisions are added in an effort to encourage settlements at waste sites, the effects are still uncertain and likely to make things worse.

The most likely aggregate effects of the Superfund amendments will be:

(1) To increase cleanup costs;

(2) To maintain an ongoing corporate liability for further costs for an unspecified time and amount and

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(3) To continue the necessity for litigation to protect corporate legal rights and thereby incur enormous litigation costs - sometimes in excess of the cost of cleanup. These costs fall primarily on companies who have wastes at sites - no matter how much - and on their insurance companies.

II. Objectives.

If Superfund continues to fail to clean up sites, there will be pressures for further modification. Reauthorization of the law is mandated by 1991. The nature of changes will depend on the emotional climate at the time of reauthorization and public perception of problems with the existing law. The 1986 amendments were predicated on perceptions that the original law was being implemented improperly and was too narrow in its scope and too general in its directives. Unless lawmakers and the public can be made to understand that the law is failing because of its own structure, other alternatives will have little chance.

This proposal will have as its objective:

THE DEVELOPMENT AND PASSAGE OF AMENDMENTS TO THE EXISTING SUPERFUND LAW THAT WILL ASSURE AN EFFECTIVE AND EFFICIENT CLEAN UP OF SUPERFUND SITES UNDER AN EQUITABLE SYSTEM OF ALLOCATING COSTS.

To do this we propose a process which:

(1) Identifies, through research, impediments to rapid and effective clean up inherent in the existing law;

(2) Builds a strong coalition to support sound changes in the law necessary to achieve our objective; and

(3) Brings forward the results of our research and strength of our coalition in an effective way and in sufficient time to have a significant impact on the reauthorization process.

III. Proposal.

William D. Ruckelshaus Associates and Charls E. Walker Associates will develop a coalition of diverse industry representatives, with separate but significant involvement in Superfund.

Possible coalition members are:

Insurance:	U.S.F.& G., AETNA, The Hartford
Chemicals:	Monsanto, DuPont, Dow, Union Carbide
Petroleum:	Occidental, ARCO, Exxon, Shell
Electronics:	General Electric

Other members of the Superfund Alternative Task Group may be interested.

This coalition would support a long-term, (two or three year) careful study of the actual implementation of the 1986 Superfund amendments, the development of an alternative proposal in anticipation of the 1991 Superfund reauthorization, and the marshaling of allies to seek changes.

Working with the members of the coalition, Walker Associates in conjunction with Ruckelshaus Associates, would track the implementation of the new Superfund law. To determine whether it is effective and efficient in the cleanup of waste sites, we would develop case studies to illustrate the need for change. We envision this effort including the following elements:

A. A review of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and its legislative history to provide a baseline reference point for our analysis of the current implementation of the law.

B. An outline of EPA regulations and guidance implementing SARA to provide a further matrix for analysis

C. A review of Superfund settlements from 1981 to 1985 to yield key information for settlement comparisons and further analysis of ongoing Superfund settlements to determine cost effectiveness, ease, and speed of settlements.

D. Analysis of how much money is spent to actually clean up sites versus "transaction costs".

E. Ongoing liaison with Congress, the EPA and the States to provide additional data and insight into actual implementation of SARA.

We anticipate that many of these elements will require credible, targeted research to establish the facts and implications of various legislative and administrative policy decisions. Some potential research areas could be:

A. An ongoing, comprehensive review of action at NPL sites to assess the magnitude and nature of transaction costs.

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B. A similar ongoing, comprehensive review of action at NPL sites to assess the implications of the SARA changes to the remedial action process to evaluate the cost, effectiveness, and timeliness of site actions including the effect of the new SARA clean-up standards, the role of states, the role of citizen participation, and the use of settlements or litigation in the remedial action process.

C. Research into the technologies used or available for remedial actions including the cost effectiveness of such technologies, the barriers to use of more efficient and more cost effective technologies.

D. Research into the implications of joint and several liability, administrative orders, and other elements of the enforcement process on the speed and effectiveness of remedial actions.

E. Research into the implications of the use of mixed funding, releases from liability, non-binding allocations of responsibility and other elements of the settlement policy on the remedial action process.

F. Research on the implications of state preemption on the size of a clean-up program with respect to the number of sites, speed of action, costs, management implications, and other factors that would result from state preemption.

G. Research on methods to incorporate appropriate measures to address bodily injury and property damage resulting from Superfund sites.

H. Potential economic implications of various fund sizes and sources on the economy generally and on those elements of the economy most affected by possible alternatives.

Similarly, with the support of the members of this group, early efforts to develop a public relations effort could be initiated to (1) determine the level of understanding of the Superfund law, (2) determine how to best present the problems it creates, (3) effectively utilize the results of research to build allies, and (4) present any alternative in the most positive way.

Assuming we can document that the law continues to generate high transaction costs and limited cleanups, we believe parallel steps must be taken to effect change. Building on the thorough research and public relations efforts that make the case for change, these are:

(1) The development of alternatives to achieve our objectives;

(2) The building of key allies in industry, Congress, the administration, academia, think tanks, the media, and select environmentalists.

Any legislative alternatives would be based on a clear recognition that they must be more effective and efficient than the current law. They must promise to maintain high environmental expectations while resolving the inherent inequities of the existing law.

We have one powerful factor in our favor and that is everyone says they are for our objective - an effective, efficient and equitable solution to a national problem. Building Congressional, Administration, and other allies will be difficult but necessary.

IV. Personnel and Fees.

The entire professional personnel of Ruckelshaus Associates and Walker Associates will be available, as needed, to work on the project. Charls E. Walker and William Ruckelshaus will share executive responsibilities. The level of fees for Walker Associates and Ruckelshaus Associates will be established when the Coalition is formed and agrees upon the size and scope of the project.

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Superfund Coalition
Summary Minutes Steering Committee Meeting
October 26, 1987

I. Attendance: Attachment 1 is an attendance list indicating those members who were present for at least a part of the discussion.

II. Mission Statement: The draft mission statement was revised and approved in final form. The major area of discussion focused on a desire by many members to assure that the mission statement reflect an ultimate objective to implement any recommendations coming from our research and not merely to conduct research. Attachment 2 is the final mission statement as unanimously approved.

III. Public Relation Committee Report:

A. Outreach: It was suggested that academic and other professional organizations be added to the outreach efforts. These could include organizations such as the National Academy of Sciences and the National Academy of Engineering.

B. Public Perspective of Superfund: This discussion reviewed current Public Relations Committee actions on assessing what public perspectives exist regarding Superfund. Bill Ruckelshaus indicated that he felt we should have a discrete research item in the public relations area designed to find out what is known as to public opinion on Superfund together with a program to analyze that information and determine what if anything we can do as an organization to affect that public opinion. Such a program would also involve an assessment as to what a program to change public attitudes would look like as well as what realistic objectives would be in terms of the amount of change possible. Some members expressed a concern that it may never be possible to distinguish public perceptions on Superfund versus the public perceptions in general on environmental matters.

Finally it was suggested that during Phase I we should establish a time table for public relations activities during Phase II. There was some concern that it would be to our disadvantage to wait too long to attempt to change public perceptions on liability.

C. Public Perception of Coalition on Superfund: Bill Ruckelshaus mentioned a conversation he had had with Lee Thomas wherein Mr. Thomas expressed interest in the group we are establishing to "get rid of joint and several liability". Other members indicated that they too had experiences which indicated that the environmental community was becoming more aware of our activities. Some members suggested that, in the context of a go/no decision for phase II, it was important to have a public relations program diagrammed and in a condition to be implemented.

IV. Review of Research Committee Activities: Because of the short period of time between the last Research Committee meeting and the Steering Committee meeting, the document distributed at the Steering Committee did not fully reflect all the suggestions made at the Research Committee. With that in mind, the discussion generally broke down into the following areas:

A. Confidentiality of Information Base: There is general agreement on the need to have an extensive information base. However, there is some concern about mixed objectives as to public release of all materials versus creating some additional incentive to becoming a member of the Coalition and having a higher level of access to the information base. This issue was not resolved, although their seemed to be a consensus that maintenance of control of the information base was a critical item for the Coalition.

B. Need for Additional Involvement of "Practical People": Several members felt it important that we, at a very early date, involve additional people with actual hands-on Superfund site management expertise. This would include technical experts who have been involved in managing Superfund cleanups on site, as well as lawyers involved in detailed negotiations over Superfund settlements.

C. Appropriateness of Our Research Topic List: Some members suggested that it was important that we pass our research topic list through a separate screen. This separate screen would consist of the list of problem areas that people actually working on Superfund cleanups felt were important. While this has already been done to a certain degree, it was agreed that we would approach active Superfund managers in member companies, as well as Clean Sites Inc. managers and ask for their input in order to develop a list of "problem areas". We would then test our research project list against this "problem area" list.

Membership: An extensive discussion on securing additional rship then occurred. A program was agreed to with the wing facets:

A. We would deemphasize any efforts to secure additional members for the remainder of phase I.

B. We would establish a membership fee of $25,000 for calendar year 1988. With this in place we would begin an active membership solicitation program for 1988. The Coalition consultants will prepare a membership solicitation letter from Bill Ruckelshaus. In addition, we will serve as a clearing house for potential member lists. Once the letter is ready, we will get back to each of the member companies with a comprehensive list of potential additional members with a high degree of interest in Superfund. Each existing member will then be asked to solicit four to six potential new members with a goal of bringing our overall membership close to 50 for Phase II.

C. Once the project funding is adequate, we will then start a second phase of our membership effort wherein we will seek large numbers of second tier members to demonstrate the breath of support for our program.

10/26/87

COALITION ON SUPERFUND

Mission Statement

Americans are united in their dedication to the national goal of resolving the country's hazardous waste disposal site problem efficiently, effectively and equitably. The Coalition's mission is to support a program that assures the achievement of this goal.

In anticipation of the reauthorization of the Superfund law in 1991, the Coalition will conduct and sponsor sound and rigorous research to understand the nature of the program established under the law and to document its implementation. It is our purpose to bring the results of this research into the public policy debate leading to the reauthorization of Superfund.

Throughout the duration of the project, the Coalition will consult with a wide range of policy-makers and other groups interested in Superfund. The results of the research will be made public in a timely manner.

MEMORANDUM

TO: SUPERFUND COALITION RESEARCH COMMITTEE MEMBERS
FROM: Lee Fuller
SUBJECT: SUPERFUND INFORMATION SYSTEM
DATE: November 4, 1987

Attached is a draft outline for a management plan for an information system to support the Superfund Coalition's programs--research, public outreach, policy, and legislative analyses.

When we have completed the plan, including costs and prospective contractors, we can submit it to the Coalition Steering Committee for its approval at the December 14 meeting. That will enable us to sign the contract(s) early next year as soon as the Coalition decides on its 1988 program.

The plan will cover the needs of the Coalition for information, the objectives of the information system, a suggested design approach, potential contractors, and estimated costs.

There are also several questions regarding access to the information system, confidentiality of data, methods of collecting new information and where the system should be housed which we need to address. These questions are listed as an annex to the draft outline.

We suggest that the November 4 meeting tentatively agree on the management approach so we can start informal contact with potential contractors to get the cost estimates, and then take up the ownership, access and other questions at our next meeting, November 17.

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DRAFT OUTLINE

SUPERFUND COALITION INFORMATION SYSTEM
MANAGEMENT PLAN

I. Superfund Coalition Information Needs
   A. Knowledge of other research.
   B. Access to data on Superfund related issues and sites.
   C. Knowledge of all relevant legal actions and costs associated with those actions.
   D. Knowledge of all aspects of site clean-up efforts, including risk assessments, remedial options, costs, management approaches, etc.

II. Objectives of the Information System
   A. Inventory of all existing information resources, including data bases, bibliographic search systems, directories, etc., that can be built into a network for direct access by the Coalition.
   B. Design of an information management system that will tie these resources together with central access and software that will allow comparison and integration of information elements from different existing systems.
   C. Identification of information gaps that will require new research by the Coalition.
   D. Design of a database to process the new information collected by the Coalition's research program and integrate it with data elements from existing sources.

III. Suggested Design Approach

A. Information modules using commercially available, off the shelf software.

B. Each module to be a separate and discrete file but to be linked for analytical purposes and to permit future growth of the system.

C. The first input to each module to be linkage with existing information systems by agreement(s) and/or acquisition of computer tapes or other products.

D. Next define data gaps for the Coalition's research program and design a system for processing the research program results.

E. Proposed system modules at this time are:

Module 1

Register of Hazardous Waste Sites (with information about what is known about each site.) Categories of information must be standardized for each site.

Module 2

Reference Service (to published and unpublished information, research programs, case studies, legal actions, experts, other information sources, etc.)

Module 3

Tracking System (for processing information related to actions taken on specific sites, including results of surveys carried out under the Coalition's research program.)

Module 4

Case File (to record results of studies carried out under the Coalition's research program.)

IV. Potential Contractors

A. For overall design and management of the Superfund Information System.

- Kadec Information Management Systems
- Center for Hazardous Waste Site Studies
- Others?

B. For access to existing information systems to be included in the Superfund information network.

- EPA (for direct access to data bases or through EPA contractors)
- National Technical Information Service (NTIS)
- Others?

C. To perform original data collection on site tracking and analysis of remedies

- Conservation Foundation
- Environmental Law Institute
- Universities
- Resourses for the Future
- Other agencies

V. Estimated Costs

A. Feasibility study to determine how much information already exists and what it would cost to collect additional data needed as part of the Coalition's research program.

B. Design of Superfund information modules.

C. Management of Superfund Information System.

SUPERFUND INFORMATION SYSTEM

IDENTIFICATION OF DATA ELEMENTS

MODULE 1. REGISTER OF HAZARDOUS WASTES SITES

BASIC SITE DATA

Size and Characteristics of Site

Volume and Character of Waste

Types of Removal, Containment or Remedial Actions Taken

Identify whether work is Fund or privately conducted

Identify formal participants in site process

PRP's

  a. Number of PRP's sued by EPA (or AO recipients)

  b. Number not sued by EPA

EPA Headquarters

EPA Regions

Citizens/Citizen Groups

State Agencies

TYPES OF LITIGATION ASSOCIATED WITH THE SITE

Federal enforcement or cost-recovery action

Federal administrative order

Third party (contribution) actions

Citizen Enforcement Action

Tort litigation

Insurance coverage litigation

Natural resource damage litigation

MODULE 2. REFERENCE SERVICE

Bibliography of studies related to Superfund implementation, NPL sites selection, community reactions, types of remedies, legal cases, etc.

MODULE 3. TRACKING SYSTEM

DEVELOP DATA ON COSTS AND DELAY FACTORS

A. Aggregate Data
  1. Suits expended by each party to the proceeding
    a. For lawyers
    b. For technical consultants
  2. Elapsed time to commencement of construction

B. Data by Phase
  1. Attorneys' fees for each party (include in-house personnel costs)
  2. Number of meetings per phase
    a. Among PRP's
    b. With government and other parties
  3. Expert witness or consultant fees per party (include in-house costs)
  4. Time per phase
  5. Cross-reference the status of all litigation (and expense figures) at each phase of site process.

Explore the Settlement Process in Detail at Selected Sites

A. RI/FS
  1. Who negotiated
  2. Cost and length of negotiating phase
  3. Result of negotiations

B. Removal/Interim Remedial Actions
  1. Who negotiated
  2. Cost and length of negotiating phase
  3. Result of negotiations

C. Settlements for Remedy
  1. Who negotiated
  2. Cost and length of negotiating phase
  3. Result of negotiations

D. Track employment of innovative settlement provisions - when were they rejected? When accepted?
  1 Mediation
    a. Private
    b. NBAR by EPA
  2. De Minimus settlements
  3. Mixed funding
  4. Covenants not to sue or limited reopeners

E. Conduct detailed interviews of key parties to site process and negotiations.

F Cross-reference status of all litigations (including tort and insurance coverage actions), pending at the time of settlement negotiations, including legal and technical expert expenditures

MODULE 4 CASE FILES

ASSESS ON THE IMPACT ON THE PROCESS OF AT LEAST THE FOLLOWING FACTORS:

1. Pending litigation of any kind
2. Joint and several liability--enforcement against less than all PRPs
3. Absence of full releases after settlement or case resolution
4. Pendency of natural resource damage claims

(This might be done through the work, for example, of law professors.)

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STRE

CHARLS E. WALKER ASSOCIATES, INC.
1730 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, D.C. 20006
TELEPHONE (202) 393-4760   TELECOPIER (202) 393-5728

October 28, 1987

To: Research Committee Members
From: Lee Fuller
Date: October 28, 1987
Re: November 4, 1987 Meeting and Revised Research Areas Listing

The November 4, 1987, meeting of the Research Committee will begin at 9:30 am. It will be held at the offices of Charls E. Walker Associates. A sandwich luncheon will be served. The meeting should conclude between 2:30 and 3:00 pm.

Enclosed is the principle document for discussion at the meeting. Revision 2 of the Potential Research Areas document handed out at the October 23 meeting. The revisions to this document attempt to include suggestions that were made at the October 23 meeting and suggestions posed in the Coalition on Superfund Proposed Research Issues document. I would hope that we can use this document to further develop the ideas of a research program. It is not intended to be inclusive. If you have additional ideas, please raise them at the next meeting. Some of these ideas may be better if consolidated and some may be unnecessary. At some point we also need to be considering research priorities.

cc: Steering Committee Members

October 23, 1987
Revision #2 10/28/87

Priority = High/Low
– effective, efficient, equity CMA doing work.

Potential Research Areas

Anft ~~Theoretical~~ Timing Remedial Action Process

H, effectiveness: A
I/T early I

1 Risk Assessment Study 3 goals: cost, choice of remedy, BI/PD.

-- Study would examine a respresentative number of NPL site RODs to determine the effect of cleanup on risk reduction.

- Review would evaluate risk assessments from EPA and develop risk assessments if necessary.

- Four cases would be examined:

Examine more

1. Risk at site w/no action
2. Risk at site w/containment cleanup
3. Risk at site w/permanent cleanup
4. Risk at site w/mix of containment and permanent cleanup
5. Risk at site w/cleanup beyond permanent cleanup (e.g., MCLs instead of MCLGs)

1B
~~2~~ Cost Study dotted line 6 Trans Costs

H, efficiency
I/T early

-- Using same NPL sites as Risk Assessment Study, Cost Study would evaluate remedial action costs for the following cases:

1. Cost at site w/no action
2. Cost at site w/removal only
3. Cost at site w/containment remedy
4. Cost at site w/permanent remedy
5. Cost at site w/mix of containment and permanent remedy
6. Cost at site w/cleanup beyond permanent remedy (e.g., MCLs instead of MCLGs)
7. Cost at sites w/natural resource damage remedy

H, EEE, I later

3 Review remedies to assess role of state participation and citizen participation. ARARs, public participation, technical assistance, delay in remedy, ECRA

~~4~~ CERCLA/SARA Matrix
1C

-- Research would review comparable sites which would demonstrate what elements of remedies are changing from CERCLA to SARA. Assessments would be made regarding the reasons for these changes (e.g., later 5. Hazardous Ranking System Study / what is purpose — This appears to be low ~~[illegible]~~ priority except for mixed wa[illegible] Sites

-- Study would evaluate the structure and use of the Hazardous Ranking System by EPA and others in the assessment of hazardous waste sites

6. Site Cleanup Prioritization Study

timing - early ↓ later ↑

-- Develop a matrix to determine what factors affect the timing of the selection of sites for remedial action such as hazard rank, type of remedy required, enforcement lead versus fund lead, number of PRPs

7. Cost Factors Study include in #2

early

-- Review different types of remedy development to determine whether different approaches affect cost including:

- PRP development of RI/FS and Remedial Action
- EPA development of RI/FS and Remedial Action
- The effect of program pace on cost due to limitations on support facilities like laboratories

8. Contractor Cost/Availability incl in #2

later

-- Review effect of contractor liability and indemnification provisions of SARA to determine what effect they are having on contractor cost, the quality of contractors involved in Superfund work, and the availability of contractors

— add to Economic Implications.

later 9. Review development of natural resource damage policy and its effect on remedial action costs. incl in #2

early 10. Review development of policy and regulations under the Hazardous and Solid Waste Amendments of 1984 that affect Superfund policy and actions. land bands, ARARs
Will rewrite This to issue

early 11. Study of development and implementation of remedial actions at a group of NPL sites compared to a comparable group of non-NPL sites. whole

12 omitted factors related to length of time to complete remedial action and comparison pre + post SARA

RESEARCH COMMITTEE MEETING

November 4, 1987

Name	Organization	Phone #
Lee Fuller	Walker Associates	202/393-4760
Dolores Gregory	Ruckelshaus Assoc.	202/956-5400
Robert I. Field	CIGNA	215/523-4056
David B. Havanich	The Travelers	203/277-4401
Ted Fischer	DuPont	302/366-6340
William C. Aldrich	Hartford Insurance Group	203/547-5416
Lee Holz	Alcoa	412/553-4232
Warren Azano	Aetna Life & Casualty	203/273-4485
Jim Kimble	American Insurance Ass'n.	202/828-7100
Mort Mullins	Monsanto	202/452-8880
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Dennis Connolly	Johnson & Higgins	212/547-8274
Thomas M. Armstrong	GE	203/373-2282
Sandra LaFevre	RAA	202/293-3335
John Dattner	General Reinsurance	203/328-5451
Jean Pancoast	General Reinsurance	203/328-5396
Joe Hovious	Union Caribide	203/794-5183
Les Cheek	Crum & Forster	202/296-5850
David Graham	Dow Chemical	202/429-3411
Nancy Haragan	USF&G	301/547-3796
Robert Shapiro	George Bernstein Law Off. Representing USF&G and Fireman's Fund	202/452-8010

STATEMENT OF
J. WINSTON PORTER
ASSISTANT ADMINISTRATOR FOR
SOLID WASTE AND EMERGENCY RESPONSE
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMITTEE ON SUPERFUND AND ENVIRONMENTAL OVERSIGHT
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

December 10, 1987

Good morning, Mr. Chairman and members of the Subcommittee. I am J. Winston Porter, Assistant Administrator for Solid Waste and Emergency Response at the U.S. Environmental Protection Agency (EPA). With me today are Morgan Kinghorn, Acting Assistant Administrator for Administration and Resources Management, Henry Longest, Director of the Office of Emergency and Remedial Response, Gene Lucero, Director of the Office of Waste Programs Enforcement, Christopher Daggett, Regional Administrator for Region II, and Roger Marzulla, Acting Assistant Attorney General, Lands and Natural Resources Division, U.S. Department of Justice.

It is a pleasure to be here today to continue this valuable series of hearings on EPA's management and implementation of the Superfund program. We are proud of our efforts to date and welcome the opportunity to discuss with you the steps we have planned and under way to further expedite the cleanup process.

Because of time constraints, we were unable to cover some of the material in my July statement, so today I will repeat, update, and expand on my earlier testimony. I will begin by outlining our current program process and progress, describe some of the program improvements we plan, and then summarize some aspects of our Superfund enforcement program.

I. CURRENT PROCESS AND PROGRESS

Three types of actions are possible under the Superfund site response program. They include removal actions, remedial actions, and enforcement.

A. Removal Actions

The removal program has been highly successful throughout the life of Superfund. Removal actions are relatively short-term actions designed to protect the public from a threat to public health, welfare or the environment. Removal actions may require an immediate response to an emergency such as a fire, chemical leak or explosion.

EPA has started over 1,000 removal actions at National Priorities List (NPL) and non-NPL sites. More than 900 removal actions have been completed. I might add that some removals are quite extensive, involving significant engineering and requiring several million dollars to complete. In fiscal (FY) 1987, we initiated a record number of over 250 removals.

SARA provided for the expanded use of removals by increasing the normal cap on removals from six months or one million dollars to one year or two million dollars. A key priority of mine is to use this new authority to solve a greater portion of the problem at a Superfund site through direct removal action.

B. Remedial Actions

Remedial actions are longer term actions that are generally undertaken at more complex sites. These actions generally take a longer period of time than removal actions, require extensive study to select the most effective option, and may cost millions of dollars to implement. They may consist of removal and treatment (such as incineration) of contaminated materials, pumping and treating of ground water, or other actions to permanently clean up a site.

For complex cases of site contamination we use a more extensive process, as called for in SARA and the National Contingency Plan (NCP). This overall remedial process involves the following steps:

- Maintenance of an inventory of potential Superfund sites called "CERCLIS." This inventory presently contains over 27,000 sites.
- The conduct of preliminary assessments (PAs) and site inspections (SIs) in order to decide which locations are serious enough to warrant Superfund expenditures. To date, over 24,000 PAs and 7,800 SIs have been carried out.
- Based on information gathered in the SI, a site is scored using the Hazard Ranking System (HRS). If a site scores above 28.5, it may be proposed for the National Priorities List (NPL). Normally, proposed and final NPL sites receive site remedial action funds from the Superfund, unless a responsible party performs the cleanup. Currently there are 951 sites either proposed for or on the NPL.

- A remedial investigation/feasibility study (RI/FS) is conducted for sites which are proposed for, or on, the NPL. There have been RI/FSs started at 604 sites, and 516 RI/FSs are now in progress. These RI/FSs may be conducted directly by EPA or by potentially responsible parties (PRPs).
- The result of the RI/FS is the selection of a remedial action for the site. This selection is called a Record of Decision (ROD). Over 230 RODs have been completed.
- Next, based on the ROD, the remedial design (RD) and remedial action (RA) are carried out. Since program inception, 183 RDs and 189 RAs, including 55 Initial Remedial Measures, have been initiated. The current workload involves about 100 RDs and about 60 RAs.
- Thirteen sites have been deleted from the NPL, and three more have been proposed for deletion. Site work has been completed at an additional thirteen sites, with longer term operations and maintenance activities continuing.

C. Settlements and Enforcement

EPA can use settlement authorities to negotiate voluntary PRP cleanup or enforcement authorities to require responsible party cleanup. EPA can obtain cleanup action by taking parties to court, by settling the case, or issuing administrative orders where there is a threat to public health and the environment. Cleanup action undertaken by responsible parties is monitored carefully by EPA.

The Agency's first priority, however, is to make sure that any direct or immediate threats are addressed as quickly as possible. If an immediate threat to public health develops, the Agency can use Fund money to address the hazard at once. An after-the-fact recovery action for the Agency's costs determines who ultimately pays. In certain circumstances the Agency can recover up to three times the amount spent at a given site.

The program has resulted in commitments for work from PRPs with a value to date of approximately $744 million at 473 sites. Cost recovery actions to date have resulted in approximately $75 million in commitments to reimburse the Fund.

A major Superfund priority is to increase the number of settlements where the work is carried out directly by PRPs. Success in this area will increase our ability to use the Fund where no viable PRPs are available.

II. PROCESS IMPROVEMENTS

As we have gained experience with the implementation of the Superfund program and as the program has matured, EPA has recognized the need for changes from some of the original ways in which we did business. Another key priority is to meet the statutory deadlines called for in SARA. We are currently projecting that we will exceed the mandatory schedules for RI/FS and remedial actions provided we make changes in the Superfund process. Superfund changes include improvements in our current RI/FS process project completions, improvements in project management and execution, reforms in our alternative remedial contract strategy, greater emphasis on streamlined settlements, greater use of our removal authority, and guidance on selection of remedies. I will briefly summarize some of the improvements under way in the Superfund program to streamline the process and accelerate activities.

A. Remedial Investigation Feasibility Study (RI/FS)

The Agency has completed several analyses over the last few years on improving the RI/FS process. Two of the studies focused on an analysis of the existing process. The latest analysis, RI/FS Improvement Analysis, discusses several initiatives to improve the overall process. The objectives of the initiatives are to (1) contain project planning activities within a three month period (2) to ultimately reduce the overall RI/FS process to an 18 month schedule and (3) reduce overall project costs. These objectives must be accomplished without diminishing the quality of the RI/FS.

In order to achieve these objectives, four major improvements will be initiated:

- Phased RI/FS execution -- this involves using the results of initial field investigation to better define the needs of subsequent phases. This leads toward earlier initiation of field activities and more efficient and effective data collection and evaluation efforts. It also provides the decision-maker with the appropriate data to evaluate alternatives and select and support a remedy.

- Streamlined project planning -- consolidate Sampling and Analysis plans and Quality Assurance Project Plans, incorporate standard procedures by reference, limit formal review of documents, initiate preliminary site work to help define a problem and use standardized tasks in RI/FS.

- Handoffs (shifting responsibilities for review activities) should be kept to a minimum. Improved management of handoffs can be handled by scheduling concurrent activities, receiving interim approvals for activities and by phasing tasks. All involved should also be fully committed to maintaining the program schedule.

- Quality Control and Technical Advisory Committee -- the use of these committees will ensure that the RI/FS process is conducted in a manner that yields high-quality products. This can be accomplished through implementation of a Region-specific RI/FS quality control process and involvement of the Technical Advisory Committee (senior level personnel based on their areas of expertise) at key project milestones. The TAC committee will be involved at various stages of the RI/FS process (i.e., work plan development, RI scoping, pre-FS meeting). The TAC will serve to identify and resolve major technical and policy issues in the RI/FS and will assist in assuring that the scope and costs are commensurate with the level of complexity of the site.

There are several documents in place or under development to assist the Regions in implementing these activities including:

- Data Quality Objectives for Remedial Response Activities (in place)
- Compendium of Field Operations Methods (in place)
- RI/FS Standardized Tasks (in place)
- RI/FS and ROD guidances (under development)

B. Remedial Design (RD) and Remedial Action (RA)

Also, the Superfund program has assigned top priority to RDs and RAs because we believe cleanup of sites is the most important element of the program. Our objective in planning for the program has been to establish a good pipeline of projects moving from RI/FS to RD and RA in a steady and manageable way. Now that a significant number of projects are beginning to reach RD and RA, it is important that those projects are started and finished in a timely fashion. This ensures that site conditions do not change between the selection of remedy and the design and construction of that remedy. It also ensures that the number of RDs and RAs initiated gradually increases as the number of RI/FSs completed gradually get larger. This will provide a balanced program with no large "slugs" of activity that will strain the resources of the Agency and the States to manage.

C. Project Management and Execution

EPA's current Superfund approach involves a significant number of "handoffs" in conducting site remedial work. The historical approach has normally involved preparation of the RI/FS by a remedial (REM) contractor, use of contract labs to support the REM, management by the Army Corps of Engineers of the detailed engineering design by another contractor, and the construction of the remedy by yet another contractor.

We intend to move toward a project management approach by which one firm would provide overall technical direction of a cleanup under EPA or State management. In this approach, the project management organization would conduct the RI/FS, provide technical support for the ROD decision, do the design engineering, and serve as construction manager. The Corps of Engineers will also be used to provide overall project management through remedial design and construction. The project management organization could, of course, use specialized subcontractors as appropriate.

This model, which is typical of much private and public engineering work, would serve to better focus accountability and responsibility for the cleanup project. By having one organization develop and implement an overall project schedule, I believe that considerable time should be saved.

D. Alternative Remedial Contract Strategy (ARCS)

Another initiative set in motion prior to the enactment of SARA is the Alternative Remedial Contracts Strategy (ARCS). This contract reform initiative is designed to increase the number of contractors supporting the program and thereby establish a more competitive atmosphere. I believe this will result in expediting the cleanup process and improving the quality of work.

The current system awards most Federal lead RI/FSs to five "prime" contractors. Three of these five REM contracts have been very large (e.g., values of up to $200 million). The other two smaller REM contracts have recently been awarded to minority businesses. This REM approach has often forced complex teaming arrangements to meet the workload requirements, which has had the tendency to fragment accountability, make project control difficult, and sometimes cause delays.

To mitigate this problem, we anticipate that the new contracting system will designate seven separate contracting zones, each of which will select contractors for Superfund work. The prime contractors selected for each zone will operate as "project managers," responsible for entire Superfund site cleanups from the remedial investigation stage through remedial design and construction management. While prime contractors can still subcontract work out to other firms, they will be ultimately responsible for all work conducted at a site. The ARCS contracts will be written to require this type of full service capability.

Increasing the number of zones in which prime contractors will be selected to seven will decrease the magnitude of the contracts and increase competition by allowing smaller firms to bid on work. Competition will be further stimulated through the selection of multiple prime contractors within each zone. Currently, we anticipate a minimum of three and a possible maximum of seven contracts per zone.

In addition, the use of a large number of contract options over and above the base amount will allow us to reward good work with more work. If a firm performs poorly on the first projects assigned, no options will be awarded and the contract will terminate after one or two projects. On the other hand, if the firm does very well on the projects assigned, EPA can award as many as 100 options, and the contract becomes a very large contract.

To promote the selection of firms of all sizes, companies will be asked to bid for one of two categories of project workloads -- 25,000 to 100,000 hours per year -- depending on the size of the company. Recognizing that many smaller companies do not have the capacity or resources to handle all the work associated with a given contract, firms will be permitted to team together. For example, a large and small firm, or two small firms having complimentary expertise could team together when bidding for work.

We plan to have the ARCS program fully in place nationwide during FY 1989. We are currently negotiating with the selected contractors for the ARCS program in Regions 3 and 5. Contracts will be awarded when we complete the negotiation of cost proposals.

III. EXPEDITING THE SETTLEMENT PROCESS

I have alluded both earlier today and in previous appearances before the Subcommittee to the critical importance we attach to the effective use of our enforcement authorities to obtain settlements from PRPs. Good settlements both expedite cleanup and preserve the Fund for use at other sites. Moreover, good settlements in cost recovery actions recoup monies for the Fund.

Our statutory authorities grant us some valuable tools to employ in reaching settlements, and we have been encouraging our Regions to wield them with vigor. In this context, I should mention specifically strict, joint, and several liability and the concepts of mixed funding, de minimis cash-outs, and non-binding preliminary allocations of responsibility, all of which I stressed in my July 23rd testimony.

Today, however, I would like to focus more narrowly on the mainly procedural and administrative steps we have been taking to streamline and expedite the settlement process. Our goal is to minimize the time between selection of remedy by the Agency and actual initiation of remedial efforts by responsible parties. To do this, we have addressed two major areas--streamlining the process for concluding negotiations and expediting the governmental concurrence, decree lodging, and decree entry process.

One of our major actions was an interim guidance on streamlining the CERCLA settlement decision process issued by Thomas L. Adams, Jr., Assistant Administrator for Enforcement and Compliance Monitoring, and me on February 12th this year. The guidance addressed three major topics--the need for better preparation for negotiations, establishment of a Settlement Decision Committee (SDC) and an Assistant Administrator level Review Team, and the institution of a deadline management approach.

The suggested improvements in preparation for negotiations stress the need for earlier and better responsible party searches, earlier notice and exchange of information, earlier initiation of discussions, and development of a settlement strategy and use of draft settlement documents. To improve PRP searches, we have initiated the idea of a civil investigator. Headquarters now has such an investigator on board, as do six of our ten Regions.

The Settlement Decision Committee, which is chaired by the Director of the Office of Waste Programs Enforcement and includes career policy level managers from the Office of Enforcement and Compliance Monitoring, the Department of Justice (DOJ), and two Regions, meets regularly for policy level review of precedential issues which arise during negotiations. The SDC is a valuable tool for coordinating policy decisions and assuring consistency of approach across the Regions, an issue in which the Subcommittee has expressed a special interest.

The thrust of the deadline management system is that deadlines should be set early by the Regions and communicated to the PRPs. The deadlines should usually correspond to the discretionary statutory deadlines, and only limited extensions may be approved by the Regional Administrator and, in exceptional circumstances, by me. To help implement the deadline management program, we will include prompt conclusions of negotiations as targets in the Strategic Planning and Management System (SPMS), the EPA accountability system.

The next major action designed to expedite the settlement process was the issuance of an interim guidance on notice letters, negotiations, and information exchange by Gene Lucero on October 19th this year. Without going into the details, let me simply say that through encouraging early transmittal of special notice (generally concurrently with the final FS and public comment process), it minimizes the lag between remedy selection and conclusion of the negotiations. It also attempts to speed up the conclusion of negotiations through reinforcing the need for preparation and early availability of a draft consent decree.

Currently, we have another critical tool under development--a planning document which includes programmatic guides for planning enforcement activities. Specifically, it addresses criteria for selecting among the available options when negotiations fail to result in settlement. The options include issuance of an administrative order (AO) followed by judicial referral under §106 of the statute, issuance of an AO followed by Fund-financed RD and RA, proceeding directly to a §106 referral; and proceeding directly to Fund-financed action. Again, these planning options are buttressed by the SPMS accountability system, which requires that within a designated quarter, a site must be subject either to a final settlement, an AO, a §106 judicial referral, or an obligation for RD.

The final initiative for expediting settlement I wish to discuss today is our effort to speed up the process for obtaining governmental concurrence in the result and lodging and entering a consent decree. We have developed a process, agreed to among our headquarters offices and the Department of Justice, that provides for early involvement by the offices in evaluation of settlements. It should result in expedited EPA headquarters concurrence in settlements and expedited signing and lodging by DOJ.

The process is being incorporated into an EPA-DOJ Interagency Agreement on Superfund and into guidance to our EPA Regions. The guidance may also address mechanisms to require

PRPs to initiate remedial designs concurrently with the lodging of a decree, which will minimize the time when work is not proceeding, a critical consideration in meeting the RA goals set out in the statute. Remedial action itself would not begin until a consent decree is entered. The tool for achieving this would likely be to indicate to the court when the complaint and decree in the case are lodged that the remedial design work will proceed during the final entry of the decree. I will be happy to furnish you a copy of this guidance, as well as the other guidances I cited, for the record when it is available.

These are some of our plans for expediting the settlement process which, in turn, is a critical link in expediting the overall Superfund cleanup process. Our efforts range from broad exhortations to highly technical legal guidance. We have high hopes for them, but I would add one caveat: should settlement efforts fail and serious litigation ensue, our unilateral control over the time element in the process disappears, subjected to the complexities of multi-defendant litigation and the calendars of the courts.

IV. CONCLUSION

In conclusion, Mr. Chairman, let me say that the Superfund program is both technically and legally complex. We have made significant progress, but we are constantly seeking ways to expedite the cleanup process and improve the quality of our response and enforcement actions. These hearings are a helpful spur to our efforts, and we look forward to continuing to work with the Subcommittee to achieve our mutual goal of countering the threat presented by long years of inadequate past waste disposal practices.

This concludes my prepared testimony, Mr. Chairman. My colleagues and I will be happy to answer any questions you may have, either now or later in writing for the record.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 19 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Honorable Frank Lautenberg
717 Hart Senate Office Building
Washington, D.C. 20510-3002

Dear Senator Lautenberg:

In your opening statement at the December 10, 1987 hearing on Superfund timeframes, you made sixteen recommendations for improving the efficiency of the Superfund program. I found your recommendations beneficial and, therefore asked my staff to respond to each of the issues you raised. Enclosed is our response.

Thank you for your thoughtful consideration of improvements in the Superfund program. I look forward to further discussion about ways to improve the program.

Sincerely,

Win Porter

J. Winston Porter
Assistant Administrator

1. EPA SHOULD PUSH ALL THE REGIONS TO STREAMLINE REMEDIAL INVESTIGATION/FEASIBILITY STUDIES (RI/FSs)THROUGH ENHANCED SITE INVESTIGATIONS AND MODEL FEASIBILITY STUDIES. THIS MEANS GETTING MORE INVESTIGATIVE DATA BEFORE THE RI/FS BEGINS AND DEVELOPING MODELS FOR REAPPLYING EXPERIENCES FROM PRIOR SITES.

I agree with your recommendation. EPA is attempting to streamline the RI/FS process by pursuing these and other strategies. Some specific examples of EPA's efforts in these areas include the following.

1) As part of its Expanded Site Investigations (ESI), EPA has foreseen the utility of collecting data during the site investigation which can be used to partially complete the requirements of the Phase I (site characterization) RI data collection activity. At present, coordination between the Hazardous Site Control Division and the Hazardous Site Evaluation Division at EPA is helping to insure the ESIs will stress the types of physical and chemical data which can be collected during the pre-remedial stage to supplement the RI and consequently, shorten the entire RI/FS process.

2) In July 1987, EPA issued an Office of Solid Waste and Emergency Response (OSWER) Directive detailing four major areas of improvement to the RI/FS process. These areas include use of the phased RI/FS approach, the use of technical advisory committees to assist in the RI/FS process, shortening the RI/FS planning process, and the use of Data Quality Objectives to focus RI/FS sampling efforts. Through the remainder of the current fiscal year, EPA will be evaluating the effectiveness of these recommendations in shortening RI/FS schedules and reducing RI/FS costs, while concurrently improving the quality of RI/FSs. EPA will, as part of this same effort, recommend further improvements to the RI/FS process as necessary to reduce time and costs. EPA's eventual goal is an 18 month RI/FS.

The use of model Feasibility Studies and the reapplication of experiences from prior sites will be evaluated during the RI/FS Improvements Follow-up Study. Significant interactions with experienced regional personnel along with possible case studies of effective solutions to RI/FS problems are included in the study and will provide an evaluation of experiences from prior sites.

2. EPA SHOULD EXPLORE WHETHER IT CAN INITIATE ACTUAL CLEANUP WORK SOONER BY INTEGRATING CLEANUP ACTIVITY INTO THE RI/FS.

Yes, much benefit is gained by integrating cleanup activity into the RI/FS sooner. As part of the RI/FS Improvements Process, which began in 1985, EPA identified and encouraged several techniques to begin actions before the completion of the final RI/FS. First, a focused feasibility study can be broken out from the longer RI/FS when the remedial investigation indicates that a separate, faster track response measures (operable unit) is justified. Secondly, certain response measures can be undertaken using either remedial of removal authorities. Generally, a removal action can be approved and implemented more quickly than a remedial action.

Implementation of these concepts is being evaluated in the next phase of the RI/FS improvements process.

3. EPA SHOULD MOVE AGGRESSIVELY TO IMPROVE AND MAINTAIN THE QUALITY OF ITS SUPERFUND WORKFORCE THROUGH TRAINING INSTITUTES AND MULTI-YEAR EMPLOYMENT COMMITMENTS.

4. TRAINING INSTITUTES SHOULD EMPHASIZE CONTRACTS, MANAGEMENT, LEGAL TRAINING AND SITE MANAGEMENT.

As a result of the proposals to improve and maintain the quality of the Superfund Workforce, EPA is pursuing an On-Scene Coordinator (OSC)/Remedial Project Manager (RPM) recruitment, development and retention project that includes training institutes and multi-year employment commitments.

This project will include the following:

1. Improve EPA workforce planning activities for the Superfund Program.
2. Develop an OSC/RPM Certification/Training Program.
3. Develop four specialized career tracks for OSC/RPMs.
4. Develop required training and continuing education.
5. Utilize training institutes and case studies to provide highly specialized training to OSC/RPMs.
6. Utilize the multi-year employment commitments, awards, and other recognition tactics to retain OSC/RPMs in Superfund Programs.
7. Develop OSC/RPM Technology Capabilities through Technology Support Centers located at ORD Research Labs and improved Technology Transfer in concert with the Administrator's initiative on Technology Transfer and Training and the recently created Office of Technology Transfer.

8. Develop an Operation Support Center that can function as EPA's national control center during Federal emergency responses to serious hazardous substances incidents. The center will also function as a training and video conferencing center for Superfund.

5. EPA SHOULD IMPROVE SITE WORK OVERSIGHT BY ASSURING THAT SITE MANAGERS RECEIVE BACKUP FROM OTHER REGIONAL STAFF AND BY KEEPING SITE CASELOADS MANAGEABLE.

I agree that it is important to improve site work oversight. In consideration of this point, as part of the OSWER Directive on RI/FS Improvements dated July 23, 1987, EPA recommends that regions form technical advisory committees (TACs) which would serve as technical experts to RPMs in the regions. TACs are groups of senior level EPA/State and contractor personnel selected to serve as technical reviewers for a project, based on their areas of expertise. An upcoming study will review the utility of TACs as backups to RPMs.

EPA has encouraged the regions to use other staff to help reduce RPM's workloads. For example, Environmental Services Division (ESD) personnel in the Regions perform quality assurance quality control reviews in most regions. Special support contracts were provided for community relations support in the regions. Support is also available from several laboratories in the Office of Research and Development (ORD).

6. EPA SHOULD USE RIGOROUS DEADLINES COUPLED WITH CARROTS AND STICKS TO ENCOURAGE SUPERFUND CONTRACTORS TO COMPLETE WORK ON TIME.

The Agency uses an award fee form of Contract for remedial contracts to increase incentive to contractors. Additionally, the new Alternative Remedial Contract Strategy (ARCS) will further increase incentive to contractors by including the potential for award of work assignments in addition to increased fee when performance merits such action. Conversely, ARCS will allow the Agency the additional latitude of reducing the award of work to contractors not performing well.

7. EPA SHOULD BACK UP ITS DEADLINES BY BUDGETING FOR PARTICULAR PROJECTS ONLY THOSE RESOURCES REASONABLY NECESSARY TO MEET SUCH TIMETABLES. SURPLUS IN THE BUDGET FOR A PROJECT DOES NOT GIVE CONTRACTORS THE INCENTIVE TO MEET DEADLINES.

The Agency agrees with Senator Lautenberg and has implemented funding procedures specifically aimed at tying dollars to timetables. In particular, Federal-lead RI/FS projects are incrementally funded. EPA develops a site work plan which establishes both schedule and budget for each phase of the plan. Payment is made according to how quickly sites progress through the RI/FS process. One note is that the Agency is not able to incrementally fund state-lead projects since states usually have a requirement that Federal funds be provided up-front.

The Agency has also developed similar procedures for Federal-lead remedial design and construction projects being conducted by a remedial contractor. Again funding and payment are made according to how quickly sites move through design and construction. However, the Agency does not have authority to incrementally fund construction projects that are conducted by the Corps of Engineers. For this to occur, the Agency will need new statutory authority granting EPA contracting authority.

8. EPA SHOULD STOP BUNDLING 70 PERCENT OF ITS CLEANUP PLANS (THE RECORDS OF DECISION (RODs) IN THE LAST MONTH OF THE FISCAL YEAR.

In efforts to get more even distribution of cleanup plans, EPA has emphasized that schedules of major milestones that occur during the remedial process may be planned as early as two years in advance of remedy selection. The goal of the remedial program is to distribute Records of Decision, which document remedy selection, throughout the fiscal year. The Regions have in the past and will continue to plan such milestones accordingly. For example in FY88, the summary of planned Records of Decision for Fund and Enforcement is as follows:

		RODS	% of Total
FY88	1st Qtr	27	15
	2nd Qtr	41	22
	3rd Qtr	71	39
	4th Qtr	44	24
		183	100%

Unforeseen delays, however, may result in schedule slippages that delay ROD signature. These delays have included extending the State's review period of a ROD in anticipation of formal State concurrence, extending the public comment period to address community concerns, extending the site schedule to allow implementation of PRP-conducted treatability studies, and extending the site schedule to allow for PRP negotiated settlements. In limited situations such as these, we believe the benefits of extending the schedule to accommodate these situations outweigh the advantages of keeping on schedule. These considerations are carefully weighed for any site prior to making a decision regarding schedule slippage.

9A. EPA SHOULD HEAD OFF COMMUNITY RESISTANCE AND DISTRUST OF CLEANUP PLANS BY INVOLVING CITIZENS AT THE EARLIEST POSSIBLE TIME.

EPA agrees with Senator Lautenberg and has used this very principle as the cornerstone of its Superfund Community Relations Program. The Superfund Community Relations Program was formed because local officials and citizens need information about public health and environmental problems posed by sites, releases of hazardous substances and proposed response actions. The Program has found over the years that the technical and non-technical information provided by citizens, and state and local officials is often very valuable, and that by consulting with citizens, EPA's decision-making process is enhanced. The Agency has also found that a Program which involves citizens at the earliest possible time prevents unnecessary problems. Because hazardous waste sites and releases of hazardous substances may potentially create strong public concern, the Agency believes an effective two-way communication program, begun at an early stage, improves the likelihood of constructive citizen involvement.

To implement this program, the Agency prepares a community relations plan at each site where EPA undertakes a technical response. The plan is based on on-site discussions with state and local officials, nearby property owners, the media, and any other interested citizens living near the site. The on-site discussions help EPA/states to learn the key concerns and specific information needs of the citizens. The plan summarizes these concerns and describes a program of communicating with the public throughout the response process. Small and informal meetings, fact sheets, press releases, telephone calls and public meetings are a few of the techniques utilized.

In addition to informal opportunities for citizen comment, the Superfund program conducts a public comment period after each Remedial Investigation/Feasibility Study is written. Citizens provide comments on the Agency's preferred cleanup during this period. These comments are considered and described in the site responsiveness summary and a final decision is made by the Agency.

9B. THIS REQUIRES GETTING THE TECHNICAL ASSISTANCE GRANTS UP AND RUNNING.

The Agency has accelerated its grant regulation development process to issue the Technical Assistance Grant regulation a year and a half after the enactment of the Superfund Amendments and Reauthorization Act. Normally, grant regulations take two years or longer.

EPA will publish the Interim Final Rule (IFR) for the Technical Assistance Grant program in late February. This rule will enable EPA to issue grants while receiving comments that will be considered in development of the final rule. EPA has prepared and distributed a fact sheet to citizen groups to help them prepare for the grant application process.

10. EPA QUOTAS FOR COMPLETION OF CLEANUP WORK SHOULD NOT MEAN SHYING AWAY FROM THREATENING OR COMPLEX SITES.

EPA has aggressively initiated studies and response actions at National Priority List (NPL) sites. Using the fund and enforcement authorities, remedial studies and response actions have occurred at approximately 600 NPL sites. The larger, complex sites generally require that actions be phased over time with the more urgent problems being addressed first. Most sites are being remedied with several operable units. For example, during FY 1987 the Agency approved 34 source control measures that will be the last source control measures taken at that site.

As required by the Statute, EPA plans to initiate 175 continuous remedial measures by FY 1990. Many of the sites on this list are the most complex and difficult that EPA and the States face. Although this does not mean that these sites will be remedied by FY 1990, it does show that we are implementing a balanced program.

11. EPA SHOULD REPLENISH THE FUND, AND PUSH THE PROGRAM FORWARD BY AGGRESSIVELY USING ALL ITS ENFORCEMENT TOOLS, AND ESTABLISHING ENFORCEMENT CONSISTENCY THROUGHOUT THE REGIONS. VIGOROUS ENFORCEMENT WILL ALSO PROVIDE INCENTIVES FOR SETTLEMENTS.

EPA is implementing this recommendation. EPA has set enforcement goals that include targets for enforcement action to both encourage private parties to undertake cleanup work and recover Fund money which has been expended. I believe that achieving the goals we have set will provide the aggressive enforcement presence necessary to provide a substantial incentive for settlements. Our goals for the 1988 fiscal year include Section 106 judicial actions to compel cleanup work (in addition to referrals which embody settlements) and Section 107 judicial actions for cost recovery. These actions will be taken throughout all ten EPA Regions in proportion to the number of sites which are ripe for such activity to assure a consistent enforcement presence.

12. EPA SHOULD ALSO SET ASIDE FUNDS FOR CLEANUP IN THE EVENT SETTLEMENT NEGOTIATIONS FAIL.

There is sufficient flexibility in the Superfund budgeting process to ensure that any project requiring remedial design (RD) funding will be initiated in a timely way. For enforcement-lead RI/FS projects, the opportunity for negotiations and settlement with responsible parties occurs between Record of Decision and RD start. The settlement is usually for both remedial design and remedial action. There are available monies in the FY 88 budget to ensure that the Fund can initiate any RD project where negotiations are not successful. The related remedial action funds would be made available in FY 89.

13. TO MOVE CASES ALONG MORE EFFICIENTLY EPA SHOULD PUSH FOR MORE SPECIALIZATION AND MORE THOROUGH CASE DEVELOPMENT BY REGIONAL LEGAL STAFF.

I agree that specialization and case development are both vital to an efficient and effective enforcement program. Currently, both legal and technical EPA staff are very specialized; they are organized into units which focus on Superfund enforcement activity. Certain enforcement activities have sections, units or staff dedicated solely to those functions (i.e., cost recovery, PRP search, etc.). Thorough case development continues to be a very high EPA priority for the Superfund program. Adequacy of case development is assured by both technical and legal participation and inadequacies can be remedied. More importantly, feedback is provided to assure that future inadequacies are avoided through training, guidance, or other means.

14. EPA SHOULD ALSO EXPLORE WHETHER CREATING LEGAL EXPEDITER POSITIONS IN THE REGIONS AND/OR HEADQUARTERS CAN STREAMLINE THE PROCESS. AS MR. MOORMAN, ONE OF OUR WITNESSES, AND OTHERS HAVE SUGGESTED, A STAFFER DEVOTED TO EXPEDITING THE ENFORCEMENT PROCESS COULD HELP BREAK LOG JAMS.

I agree that an expediter, either in the Regions or in Headquarters, may be effective in expediting enforcement activity, though the value is likely to vary depending on the set of circumstances which are delaying the enforcement process. An expediter position is not currently specifically designated within the Superfund program, however, supervisors and managers have, in practice, served in this capacity. Also, OSWER has had in operation for over a year a "Settlement Decision Committee" which consists of key decision makers at EPA and DOJ. The Settlement Decision Committee meets every month specifically to help resolve settlement issues. We are considering use of persons to resolve disputes by PRP in negotiating and implementing consent orders and decrees. A work group is being established to address this.

15. IN MOVING FORWARD WITH A MORE COMPETITIVE CONTRACTING PROGRESS EPA SHOULD WORK TO IMPROVE THE EFFICIENCIES OF ITS OWN PROCEDURES AS WELL AS THOSE OF STATES USING SUPERFUND MONEY.

The Agency is striving to ensure efficient use of contractor support in the Superfund program. Four specific areas of effort follow:

- All contract Project Officers are trained and certified under the formal Agency Project Officer certification process. This includes prerequisite experience requirements and completion of two training courses and attainment of passing grades on the respective examinations.

- Ensuring sound management of projects completed with contractor assistance is addressed in additional materials given to Project Officers and Project Managers. The Remedial Project Manager Handbook recommends a "team building" approach for managing individual projects. The creation of a site-specific project management team, which could be part of or could be in addition to the Technical Advisor Committee (TAC), would insure that all participants, in the RI/FS and remedial design and remedial action processes (e.g., lawyers, contract specialists, data reviewers, community relation coordinators, RPMs) know what is expected and are coordinating to produce quality work quickly.

- We have established a new unit within the Office of Program Management in the Office of Emergency and Remedial Response to oversee contracts that implement Superfund. The two major functions of this unit are (1) to proactively identify contractor problems and work with the Regions to resolve them, as well as to recommend systemic support to contractor management; and (2) to develop an efficient long term contracts strategy that maximizes contract efficiency, competitiveness and performance.

- Several training courses to assist program personnel (e.g., RPMs) effectively manage contractor tasks are currently under design.

16. EPA REGIONS SHOULD DEVELOP AND IMPLEMENT STRATEGIES TO MOVE FORWARD AGGRESSIVELY, AND ASSURE THAT FAILURES TO SPEND ALLOCATED FUNDS ARE NOT DUE TO INEFFICIENCIES.

The Headquarters Superfund office has provided recent guidance to the Regions, which implemented would ensure maximum utilization of funds over the new several years, especially relating to moving projects through the remedial pipeline. Two recent memoranda highlight this approach: (1) The August 19, 1987, memorandum on "Superfund Project Execution" focuses on the remedial investigation/feasibility study process; and (2) the December 28, 1987, memorandum on "OSWER Strategy for Management Oversight of the CERCLA Remedial Action Start Mandate" focuses on the remedial design/action process.

The emphasis on meeting timelines relates as well to appropriate expenditure of funds. In FY 87, the Superfund program obligated 99% of it allocated RI/FS funds, 92% of its allocated remedial design funds, and 85% of it remedial actions funds. An end of the year responsible party takeover of a $20 million remedial action accounts for most of the shortfall (12%) in spending the remedial action funds. In FY 88, we anticipate a comparable expenditure of allocated funds.

Testimony of Thomas P. Grumbly,
President of Clean Sites, Inc.
to the
Senate Environment and Public Works Committee's
Subcommittee on Superfund and Environmental Oversight
December 10, 1987

I. INTRODUCTION

I would like to thank Sen. Lautenberg and the members of the subcommittee for inviting Clean Sites to submit this testimony. I also commend the Subcommittee for examining voluntary settlements and cleanups under Superfund. They are, I believe, a key to the cleanup of many hazardous waste sites.

Clean Sites Inc. is a non-profit organization that was established solely to speed the voluntary cleanup of hazardous waste sites. A coalition of business, environmental and former government officials, operating at the request of then Environmental Protection Agency Administrator William D. Ruckelshaus, created CSI on the belief that the Superfund cleanup trust fund, no matter how large, would not be enough to clean up the thousands of hazardous waste sites in this country.

A premise in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is that private-party cleanup is the preferred solution. Congress in Section 122 of the Superfund Amendments and Reauthorization Act of 1986 (SARA) provided additional incentives and authority to further private party assumption of their responsibilities to clean up the nation's hazardous waste sites.

My testimony will discuss how well this mandate is being carried out. For the purpose of clarity I have divided my discussion as follows: Section II, CSI's settlement experience; Section III, progress in achieving settlements; Section IV, the major obstacles to achieving a greater number of settlements; and Section V, summary.

The major impediments, which I will discuss in Section IV, are (1) lack of aggressive enforcement against recalcitrants, (2) slow decision making, (3) insufficient use of third-party neutrals and alternative dispute resolution, and (4) insufficient attention to accelerating cleanup of sites not on the National Priorities List.

II. CSI EXPERIENCE

A. Obstacles to Settlements Prompting CSI's Formation

Three and a half years ago it was clear to CSI's founders - as well as a great many others - that responsible parties and the government needed mechanisms that were not yet in place to deal with the logistics involved in settlement agreements. I say logistics because, for one thing, an agreement and voluntary cleanup at one site may require the mobilization of scores, hundreds, or even thousands of responsible parties. Clean Sites was formed to play a role in assisting in that effort.

At the time, it also was clear that corporate America was not going to clean up voluntarily from only altruistic motives. And those companies truly concerned about the environment, as well as future liabilities, certainly were not going to step forward more than once or twice when, if they did, they saw their competitors escape without paying a dime. The founders of CSI clearly envisioned the organization as a catalyst to develop incentives to attract responsible parties to assume their responsibilities.

B. CSI's Experience at Sites

Clean Sites, with a staff of about 40 professionals, has been helping responsible parties and/or government agencies move toward achieving a voluntary settlement or cleanup at about 50 sites.

By helping move toward settlement I mean that the organization has helped the parties perform one or more tasks, such as understanding the process and the facts at a specific site, organizing responsible parties into committees, helping to divide the cleanup costs among them, working with the community, or planning the cleanup itself. This is the support work that must be conducted to enable a voluntary cleanup to get underway, which I spoke of in connection with Clean Sites' founding.

Specifically, Clean Sites has helped bring about final settlement agreements to undertake removals, remedial actions, or cleanup studies costing a total of about $85 million. The agreements - some of which already have resulted in completed work - were reached at 12 sites. (The sites are listed in Attachment One.)

Currently, six other agreements in which CSI has assisted - that represent about $64 million in study and cleanup costs - are pending. This means that the responsible parties and government have informally agreed to the terms of the settlement, but an administrative order has not been issued by EPA, or in the case of a consent decree, approved by the court.

C. Incentive to Settle - "Mixed-Funding"

As I mentioned, CSI was established in part to pioneer settlements that give parties incentives to step forward. One key aspect of CSI's work in that area has centered around developing with PRPs and government mixed-funding settlements in appropriate cases.

Mixed funding allows settlers who are not responsible for all the waste at a site to be reimbursed for a portion of the cleanup costs from the fund, and SARA requires the government to make all reasonable efforts to recover the reimbursement from responsible parties who refuse to join the settlement. Thus if the government sues viable recalcitrants and is successful, the fund should wind up paying nothing.

CSI has been involved in two of the three mixed-funding settlements that authorize the settlers to recover a portion of the cleanup costs from the fund that have been lodged in court. They are McAdoo in Kline Township, Penn., and Motco in LaMarque, Texas.

The recent lodging of mixed-funding settlements is an example of the progress that has been made in the Superfund settlement process in the past four years. Increased use of mixed-funding coupled with suits against recalcitrants will signal responsible parties that stepping forward will not place them at a disadvantage relative to those who refuse to pay their share.

III. THE SUPERFUND PROGRAM: PROGRESS IN ACHIEVING SETTLEMENTS

A. Codification of EPA's 1985 Settlement Policy

The settlement process has progressed and matured in other significant ways. Last year's reauthorization of Superfund largely codified EPA's Feb. 5, 1985, interim CERCLA Settlement Policy which provided for mixed funding, limited releases and de minimis buyouts -- powerful tools to streamline the process and provide incentives.

Congress' legislative stamp of approval freed EPA to issue additional guidance to regional offices outlining when and how to use these settlement approaches. Some of the settlements that seemed to have been stuck for more than a year now have been lodged in court.

B. Organizational Obstacles Reduced

Responsible parties now are better able to allocate cleanup costs, to organize themselves and reach agreements with governments. Sophisticated resources, like Clean Sites, are available to help them and government achieve settlements; and a cadre of able attorneys and environmental managers are seasoned in the art of achieving settlements.

Allocations - dividing cleanup costs at sites - not long ago a seemingly impossible task - have been achieved at scores of sites. They have become increasingly sophisticated, relying heavily on computers and extensive data bases. Certainly dividing cleanup costs - the heart of a settlement - now is thought of as possible by those who have participated in settlements - a number, by the way, now in the thousands.

C. Total Settlements Achieved under Superfund

On Oct. 20, J. Winston Porter, EPA assistant administrator for the Office of Solid Waste and Emergency Response, said that in the five-year history of Superfund, settlements have accounted for $744 million in response costs at 473 sites. An additional $67 million worth of settlements are in the final stages of concurrence, he said. That comes to an average of about $1.5 million per site, which indicates that, as one would expect, the majority of settlement activity has been for the smaller ticket types of work, such as studies and removals.

Porter continued that EPA in 1987 reached 19 settlements for remedial designs and remedial actions with an approximate value of $112 million. It exceeded its targets for private-party remedial investigations and feasibility studies starts, reaching a total of 64, with an approximate value of $48 million.

D. Groundwork of Settlement Process In Place

The question is what do these numbers tell us? Certainly they show progress but, are they indeed, impressive? Not against the backdrop of the 951 sites currently on or proposed for the National Priorities List and the thousands of additional sites that require cleanup. I think the numbers do demonstrate, though, that the program is maturing and that private-party settlements can work and are working.

The record of settlements and the other accomplishments I described make clear that the groundwork for a Superfund program that relies in good part on voluntary settlement has been laid. Now the program needs the incentives - the same ones everyone discussed four years ago - to really take off.

IV. OBSTACLES TO SETTLEMENT

A. Insufficient Enforcement Against Recalcitrants

Lack of aggressive enforcement against recalcitrants is a major problem in the program. Vigorous enforcement against recalcitrants, by the way, has been called for by responsible corporations since the program began.

Until individual corporations know that they will be sued for their share if they fail to join voluntary settlements, neither CSI, nor Congress, nor the American people will see companies stepping forward in larger numbers to clean up voluntarily.

The dynamic is simple. If a company knows that there is only one chance in a thousand that EPA will sue it if it fails to join a voluntary settlement, there is little incentive to do so. If the good citizen corporation steps forward once or twice and watches its competitors escape payment, you can be sure it will not step forward so readily the third time.

Therefore, to make Superfund work as Congress intended, voluntary settlements must become a more financially attractive option than recalcitrance for individual companies. This will happen only if EPA and the Justice Department vigorously sue recalcitrants who fail to join settlements. EPA, far more often, should be using the powerful enforcement tools that Congress gave it by suing recalcitrants for cost recovery under Section 107 of SARA, or ordering them, under Section 106, to conduct a portion of the cleanup.

An effective strategy is for the non-settlers to be sued at the same time the agreement between the government and settling parties is attained. Having preparation of a settlement and preparation of a potential enforcement action move in parallel is a mighty incentive for those not at the negotiating table to see.

B. Slow Decisionmaking

The other major impediment to voluntary settlements and timely cleanups has been the slow decision-making process.

EPA's Interim Guidance on the Streamlining the CERCLA Settlement Decision Process, issued by Winston Porter Feb. 12, 1987, was refreshingly candid on the pace of decision making. Its direction for improvement appears sound. Now, the guidance needs to be carried out.

If a government agency allows months to elapse before responding to a proposal during the negotiation period, the result can be that one or more of the parties walk away from settlement. A flow of decisions is crucial to keeping up the momentum of a settlement.

Within the group of responsible parties, a flow of decisions also is critical. Responsible parties must be willing to seek "rough justice" in the division of cleanup costs. In Superfund there is no such thing as a "fair share" strictly speaking. To get a settlement moving, it's sometimes is necessary for the parties first notified as having responsibility for a site to agree to an interim allocation of costs among just themselves to pay for a remedial investigation/feasibility study - the first step in a voluntary cleanup. These parties must trust that later more responsible parties will be brought into the settlement and will be part of a full blown allocation of cleanup and study costs.

Another stage in the voluntary cleanup process that should be made shorter is the period between "agreement in principle" by the parties and the government and the government's lodging the settlement in court. Every month that elpases before the agreement is issued as a final settlement means more time for contamination to seep into ground water, more time for drums to deteriorate and leak, more time for the community to be exposed to potential hazards.

These delays not only impede the rate of cleanup but they actually undermine the settlement process. Environmental managers must be able to show their superiors positive benefits of engaging in settlements within a reasonable time after entering settlement negotiations. Moreover, if settlements cost as much and take as long as defending against a government suit, why get involved in one -- especially when the there is only a possibility of a suit.

A major reason for the delay stems from the fact that the site cleanup is an information driven process which will break down if key information is not developed early and shared widely. The nature of the relationships between the players and the large number of them, however, often impedes this critical information exchange.

Moreover, the way decisions are made in Superfund settlements largely reflects the fact that the program is young. A decision-making chain must be established that encourages decisions to be made on the level closest to the site and as quickly as possible.

This means that EPA headquarters must continue to delegate authority to regional offices and professional staff and at the same time build in a clear route back up the ladder and to headquarters for appeals.

Congress also can have an enormous positive influence on the rate of government decision making. As we all remember, four years ago EPA's Superfund enforcement program was rocked by Congressional and Justice Department investigations. We have come a long way since then. I think most observers would agree, however, that one cost of that period has been some continuing trepidation on the part of some Superfund managers to make cleanup-related decisions.

EPA, of course, must be accountable for its actions to Congress. I suggest however, that the Congress not judge EPA on any one or two specific settlements that may embody some innovative elements but on an entire set of settlements, perhaps 20 that can provide a reasonable evidentiary base against which to measure whether the agency is achieving the results intended by Congress.

Fundamentally, the EPA professional staff member at the regional level must be empowered to make decisions. Exercise of that authority can only come as the result of diminished fear of making a mistake.

Concomitantly the agency needs more and better training programs and better information systems that track the details of cleanup remedies and settlements to better equip decision makers.

C. Insufficient Use of Alternative Dispute Resolution

A need that goes hand-in-hand with the decisionmaking, is the need for greater use of third-party neutrals and alternative dispute resolution (ADR).

The settlement process is generally a prime target for the use of mediation in that sites usually involve a large number of parties often with opposing interests, complex technical and legal information, various levels of government and contentious issues.

As I mentioned the site process depends on the flow of key information. If EPA fails to share its site and PRP information or if significant PRPs fail to educate themselves, the prospects for private cleanup diminish or evaporate. Thus despite the complex organization of the EPA Superfund program, a close following and understanding of key elements of the process can help the cause of a timely settlement.

A neutral third party can facilitate this information exchange; it can assemble the data so responsible parties and government can be confident that the work was handled without bias; it can help clarify positions of the parties to minimize time consuming misunderstandings that can halt progress for weeks, even months.

A trusted third party can help government agencies at the local, state, and federal level better understand each's interests and the factors that give rise to their positions in a settlement negotiation.

It is important to stress that ADR mediating any settlement or dispute, the third party neutral never infringes on the decisionmaking authority of the parties. Their job is typically to clarify the facts and facilitate agreements without advocating any one point of view. However, third party neutrals do make decisions when conducting a binding arbitration or binding mediation, and this, of course occurs at the request of the parties involved.

EPA issued its first guidance on ADR Aug. 14, outlining criteria for using ADR techniques, such as mediation in settling hazardous waste cleanups as well as in other areas of environmental regulation.

Since EPA had restricted use of formal ADR pending issuance of the guidance, its release opened the door to greater use of mediation. The document was also important because it clearly urged EPA staff to use ADR where appropriate, calling on the regions to recommend at least one case each in which ADR could be used in the coming year.

It now is up to organizations, like CSI and the American Arbitration Association, who have had successful experiences with ADR at hazardous waste sites, and EPA to spread the word and step up use of this tool. It is also incumbent that the responsible parties participate in that effort.

D. Insufficient Federal Review of Cleanup Plans for Non-NPL Sites

In our experience, another emerging problem further slows down the ability to achieve the ultimate goal - cost-effective cleanup of hazardous waste sites. There is a need for appropriate federal review of voluntary settlements and cleanups of sites that are not currently on the National Priorities List.

States and responsible parties understandably fear "double jeopardy" if they conduct a cleanup under state authority. Concern that they later will become subject to different and possibly conflicting federal requirements has made them unwilling to take the chance to launch cleanups of these sites.

Superfund must be reserved to clean up the most serious sites that are not being cleaned by private parties. However, a relatively small expenditure would allow the cleanup of non-NPL sites to move forward and dramatically speed overall cleanup.

The remedy is for EPA to assign staff to review the plans for these sites. Further, EPA should issue guidance to clarify its procedures on how it intends to fulfill its responsibilities in the area of non-NPL sites.

V. SUMMARY

The settlement process is crucial to cleaning hazardous waste sites at anywhere near the rate that Congress and the American people expect. The process finally is poised, ready to work. What is needed is for private parties in large numbers to step forward to clean up voluntary - and for that they need a strong incentive.

We urge EPA to make greater use of its enforcement powers by being more aggressive in suing recalcitrants who fail to join settlement agreements for cost recovery and in issuing to these parties unilateral orders to carry out cleanups.

Both EPA policymakers and the Congress have a role to play in streamlining the site decisionmaking process, which now is a major impediment to a greater number of settlements. EPA should work to empower its staff professionals closest to the sites to make decisions; the Congress should review the success of the settlement program when enough settlements have been completed to provide a sufficient basis for evaluations, and PRPs should seek rough not absolute justice in coming to agreements among themselves on how to divide cleanup costs.

The site process depends on the flow of key information among parties that often have competing interests. Third party neutrals could play a greater role in facilitating the exchange of information and the compliation of accurate and unbiased data, particularly helpful in achieving mixed-funding settlements.

Also, a relatively small expenditure by the federal government in the review of cleanup plans for non-NPL sites would allow the cleanup of those sites to move ahead more quickly.

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Attachment 1

CSI'S RECORD AT SITES

Sites where Clean Sites has helped bring about final settlement agreements to undertake removals, remedial actions, or cleanup studies costing a total of about $85 million.

- Maryland Sand and Gravel, Elkton, Md.
- MOTCO, LaMarque, Tx.
- Neville Chemical Co., Santa Fe Springs, Ca.
- PAS-Clothier, Granby, N.Y.
- PAS-Fulton, Fulton, N.Y.
- PAS-Oswego, Oswego, N.Y.
- Pine Swamp, Hamden, Conn.
- Rose Chemicals Co., Holden, Mo. - two administrative orders
- SED, Greensboro, N.C.
- Wauconda, Wauconda, Ill.
- Jadco-Hughes, Belmont, N.C.
- McAdoo Associates, McAdoo, Pa.

Much of CSI's work - in allocation, settlement negotiation, cleanup planning - has been aimed at streamlining the process and providing incentives to clean up voluntarily. For example:

- The Motco agreement for remedial cleanup action - where CSI conducted an arbitration - employed the first mix-funding settlement aimed at providing an incentive to voluntary cleanups. Mixed-funding means the government authorizes the settling parties to seek reimbursement from the Superfund for a portion of the cleanup costs.

- At the Clothier site - CSI allocated cleanup costs and helped plan a similarly innovative settlement strategy that called for the responsible parties to carry out a portion of the cleanup while at the same time the non-settlers were issued a unilateral order to pay for the remaining portion.

- At the SED-Greensboro site, CSI helped 180 parties achieve a settlement for the removal of six-million pounds of material contaminated by polychlorinated biphenyls, conduct the removal, and decontaminate two warehouses - all within one year.

- At the PAS-Oswego site, CSI used the innovative technique of examining how waste moved among a group of interrelated sites to allocate responsibility for waste. By determining which wastes were shipped from the main PAS-Oswego site to eight so-called "satellite" sites, CSI laid the foundation for the division of cleanup costs not only at the main site but at two satellites.

* At the Neville site, CSI mediated disagreements over technical issues between the state and a PRP, making way for a settlement agreement under which a cleanup study is being carried out.

* At the Rose Chemicals site, CSI helped to organize 700 responsible parties to enable them to undertake a voluntary removal of 13.5 million pounds of PCBs. CSI is helping the settling parties plan the cleanup and helped them coordinate it with the settlement agreement.

* At the Pine Swamp site, CSI helped responsible parties and the state of Connecticut achieve a settlement agreement to carry out a remedial investigation and feasibility study and is validating the cleanup study to ensure it meets not only state, but also federal cleanup requirements.

STATEMENT FOR THE RECORD

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

SUBCOMMITTEE ON SUPERFUND AND ENVIRONMENTAL OVERSIGHT

by Suellen Pirages, Ph.D.
Director
Remedial Contractors Council
of the National Solid Waste Management Association
Washington, DC

STATEMENT FOR THE RECORD

This statement is being submitted on behalf of the Remedial Contractors Council (RCC). The Council is a component of the National Solid Wastes Management Association. Members of RCC are commercial firms involved in all aspects of cleanup and collection activities. The member firms range from large national companies that have worked with the U.S. Environmental Protection Agency (EPA) in a variety of contracting activities and medium-sized, regional firms that choose not to contract with the Federal government.

A major concern of all of our members is that the administrative and contractual barriers currently found in the EPA contracting process will lead to a scarcity of resources for addressing the Federal Superfund program. Many of our member companies voluntarily choose not to respond to solicitations from the EPA because of the costly barriers that currently exist. The same members, however, do not hesitate to undertake contractual obligations with other Federal and state agencies, such as the U.S. Coast Guard. Our statement today will try to illustrate where the major problems exist in the current EPA process.

I must emphasize to the Subcommittee that the recent reorganization of the EPA Contracting Office has been a "step in the right" direction. Many problems are being addressed under the management of David O'Connor. However, the RCC would like to provide the Senate Subcommittee with a better understanding of the extent of the problems.

Time Delays in Contract Award

The Agency has taken an inordinate amount of time to finalize contract awards. In reviewing this issue with members, it was noted that delays from 14 months to two years can occur between the notice of contract solicitation and final award. For example, ERCS contracts awarded in Zone 1, 2 and 3 have taken more than 14 months from the time that the Request for Proposal (RFP) was issued to actual award of contract.

For a Region VII EPA contract, 10 months passed after the RFP before the contract was awarded. In Region IV, a currently unresolved RFP was first issued 15 months ago. In Region III, a solicitation was announced for a mini-ERCS in February 1987. Bids were due in April 1987. As of the end of November, however, the bids had not been reviewed. EPA has indicated that it will not start review until January of 1988, with award targeted for April or May.

Such delays make it very difficult for medium and small companies to participate in the EPA contracting process. These companies cannot afford the high cost associated with waiting two years for EPA to reach a decision.

Contractors have indicated that much of the delay in EPA contract award appears to be the inability of EPA to reach a decision. This results in large part from undue scrutiny by the Office of the Inspector General (OIG). New information is not sought during this time. Very little of the delay is attributed to protracted negotiations for a final bid. In general, reasons for delay include a lack of manpower, a problem of inexperienced contracting officers, and lack of timely audit support from the Inspector General and Defense Contract Audit Agency (DCAA).

Cost for Preparing a Response to an EPA Solicitation

Typically the Agency allows only 30 to 60 days as the response time for companies to submit a bid proposal. This very limited time for response creates extremely high costs on the part of companies seeking the contract. Members of the RCC have indicated front-end costs as high as $125,000 for bidding on an ERCS Zone contract. Less complicated procurements are estimated to range from $30,000 to $50,0000 for large company responses. Smaller companies within the membership have suggested cost figures from around $20,000 to $30,000. Two specific examples include:

- the MOTCO contract for $40 million cost a bidder $100 thousand and 800 mandays for preparation, and
- the Rocky Mountain Arsenal contract for $22 million, which had front-end costs of $90 thousand and 600 mandays of effort.

Responding to an EPA contract requires a greater expenditure of manpower than in other agencies. For example, an average contract proposal that would require three to four people to complete for EPA requires only one or two for a similar bid for the U.S. Coast Guard. One of our members shared an experience with me. Six to 12 people working 60 hours a week for the 6 to 12-week time period were required to write the initial bid proposal for an ERCS contract. Responses to interrogatories following submission of the bid required input from four to eight people with work-time ranging from two weeks to one month. This was then followed by three months of negotiations over the final amount of the contract. The company reported that the total cost of this particular effort was around up to $75,000.

Members consider the response times required by EPA to bid solicitations to be insufficient. Reasons for this view include:

- the level of detail required by EPA in developing a bid estimate,
- the frequent need to identify appropriate subcontractors, and
- ambiguities in the solicitation that require extensive pre-bid evaluation.

In addition to being expected to absorb the front-end, non-billable cost as a consequence of competing for an EPA contract, there are substantial back-end, non-billable costs. These are usually associated with extensive auditing required by EPA. Costs of these audits often can be as high as bidding costs. Member companies related such experiences as having an audit repeated within a very short time (two to three months) simply because bid proposals for two different contracts had been prepared.

Another problem that contributes to the high cost of preparing responses to the EPA bids is the level of detail that is required in response to the solicitation. Our members contend that much of the detail is unnecessary and irrelevant to the actual, substantive aspects of the work to be done. For example, in responding to a mini-ERCS solicitation, companies are required to provide bids for decontamination stations, which would include estimates on trash cans, wash tubs, chairs, water jugs, and even long handled brushes and other items such as stirring hot plates. On the other hand, the companies are not allowed to provide estimates of the cost of respirators, the fully incapsulated resistance suits, and other specialized personnel protective gear that may be peculiar to the particular job.

Comparison with Other Agencies

In general, response to an EPA solicitation requires far more manpower and expenditures than other Federal or state contract bids. This is due partly to the complex and detailed nature of the EPA requirements in response to the solicitation; but it is also due to ambiguities contained in the solicitations. Because of the ambiguous nature of the solicitation, companies must make assumptions about the kind of work and the level of effort required by EPA and must evaluate several different potential scenarios that might occur during the contract period. As the EPA and Corps of Engineers have similar processes, it is not surprising that EPA's bidding costs are only slightly higher. However, comparisons with the U.S. Coast Guard provide different results.

In contrast, the Basic Ordering Agreements (BOA) as developed by the U.S. Coast Guard frequently has been mentioned by all members as a well functioning contracting process. The Coast Guard will solicit bids and compile a list of contractors including prices for the variety of services that can be performed. In the case of a removal action, the Coast Guard would then refer to the list of contractors and select the lowest bidder. If that particular contractor is unable to respond at that time, the Coast Guard simply selects another from the list.

The BOA process is straightforward because contractors merely supply their best prices and the U.S. Coast Guard evaluates their competitiveness. The BOA process' simplicity also tends to attract a greater number of contractors. In this way, the Coast Guard uses competition rather than auditing to achieve an effective and efficient contracting environment.

Members of the RCC have indicated that the cost of responding to the U.S. Coast Guard are considerably less because the Coast Guard solicitations provide more specific information about the actual work required. The members have estimated that responding to the Coast Guard BOA requires only 10% of the equivalent manpower required for responding to an EPA contract bid.

Conclusion

The high cost of bidding resulting from a contracting process that is complex and preoccupied with detailed cost data discourages businesses from seeking EPA contracts. High front-end costs are especially undesirable to contractors. As in the case of a Region III mini-ERCS contract, a company is guaranteed only $40 thousand per year of work. For small businesses grossing only $5 million or less, a guarantee of $40 thousand per year is hardly worth the effort, if it costs the contractor $20 thousand to $30 thousand to bid.

More generally, EPA's hesitancy to actually clean many sites reduces the volume of work a contractor can expect. It appears that the Agency prefers to scrutinize repeatedly various management options at each site rather than get to the business of clean up. Faced with less than satisfactory work volumes, contractors are apprehensive whether cost recovery is possible.

Bidding costs must be in line with the value of the contract. However, the current contracting system sets up many costly and unreasonable roadblocks that only the largest companies can attempt to surmount. Essentially, the low profitability (ranging from three to nine percent) and high risk inherent in hazardous waste work, stacked against high bidding costs, do not compare favorably. This disincentive is hardly appropriate given the overwhelming amount of work that exists in the Superfund program.

Paradoxically, EPA's preoccupation with contracting detail does not carry over into the technical qualifications of competing contractors. Contracts are bid with little or no qualifications requirements for financial or technical ability. This permits firms with inadequate personnel, equipment, and experience to bid with lower overhead costs than qualified firms. Awards to technically unqualified contractors are no bargain for the Superfund program when their remediation requires correction after a few years.

Even after requesting vast amounts of data, the Agency is unable to review bids in a timely manner. Delays of 14 months to two years are the norm and further discourage wider participation in the Superfund program. Lack of manpower and the large bureaucratic consensus that must be reached before the award is granted unnecessarily delays contract awards.

The EPA needn't reinvent the contracting process to have an efficient one. The U.S. Coast Guard's BOA is effective, quickly issued, easy to bid on, and fair to all involved. In contrast to some EPA contract bids costing $30 thousand and requiring 3 employees working for 8 weeks, Coast Guard's BOAs often require only one firm's employee to work for a month at 10% of the cost of an EPA bid, and at the end of the month the contract is awarded.

Such costly contracts with the EPA are not uncommon, and if EPA adopts straightforward and decisive approaches in its contracting system, they could reduce the burdens both on themselves and contractors and enhance Superfund's effectiveness. As currently managed, EPA has impoverished Superfund's ability to remediate CERCLA sites and protect the public from releases of hazardous wastes.

Bidding and Awarding of Remedial Construction Contracts for Hazardous Waste Sites

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ABSTRACT

Superfund cleanup contracts are often competitively bid in order to comply with established procurement policies and to create an atmosphere of competition with the goal of completing the remedial cleanups in the most cost effective manner practical.

The organizations and facilities with the capabilities to undertake a given remedial construction contract are often very few in number. In particular, the scarcity of facilities legally permitted and technically qualified to dispose of waste from Superfund sites makes a truly competitive environment very difficult to achieve for many cleanup construction programs.

The purpose of this paper is to assess the procurement process for competitively bid remedial construction contracts. Recommendations regarding procurement policy are presented that will enable the designers and agency personnel to obtain more responsive bids by developing design packages in a manner that encourages a greater number of responses and lower bids.

INTRODUCTION

The procurement process for remedial construction projects consists of the following principal steps:

- Preparation of a design and bid package
- Establishment of bidder qualifications
- Advertisement of the project
- Bid review
- Award of the construction contract

The following sections describe these steps and include recommendations for performing each of these steps such that the number, quality and responsiveness of the bids received are to the contracting agencies' or organizations' benefit.

PREPARATION OF THE DESIGN AND BID PACKAGE

The format and organization of bid packages should be prepared in a manner that facilitates their review by the prospective bidders. One way to accomplish this is to utilize standard formats for the preparation of engineering specifications and the technical aspects of the bid package. Both the U.S. Navy (Navy) and the U.S. Army Corps of Engineers (Corps) have approved a standard format used for all construction projects for which those agencies are responsible. This specification format, with some adjustment, also is applicable to hazardous waste remedial action contracts and has been utilized successfully on remedial contracts led by those agencies for the past 5 years. Experienced bidders tend to be familiar with these types of packages, thus, it is highly recommended that the formats adopted by the Navy and by the Corps be utilized. In addition, guide specifications already approved for many types of construction activities (such as fill placement, sewage line installation, water line installation and concrete construction) are published by these agencies and are available for public use. The utilization of these guide specifications makes the bid package relatively consistent with past practices that probably are familiar to prospective bidders.

These guide specifications are edited by the design team in order to make the remedial design site-specific and consistent with the needs of the given cleanup. The basic content and the format of these guide specifications have been utilized on numerous projects within the hazardous waste, civil and military construction industries. Their utilization to the maximum degree practical is recommended for hazardous waste cleanup projects. In addition, to enable the bidders to fully understand the construction intended by the design documents and to perform accurate cost estimates and quantity "takeoffs," the following should be considered:

- Use of commonly recognized construction symbols
- Normal construction nomenclature
- Drawings of sufficiently large scale to understand the project
- Uniformity with respect to standard construction details

These items, to which the construction industry (including the remedial construction industry) has become accustomed, will provide an understandable design and will aid contractors in preparing their bids.

An excellent way to improve the clarity of the design and bid package from the perspective of a bidder is to require the designer to perform a contractor's estimate using the design and bid package. This cost estimate should be performed by a group of individuals who did not participate in the preparation of the design and bid package. During the process of preparing this estimate, the estimating team members should comment on the clarity and constructibility of the remedial design as presented in the bid package. This type of quality control provides a good check of the design and bid package prepared by the designer and should include provisions for the resolution and disposition of the comments offered by the estimating team as a normal part of the design review process to be implemented for hazardous waste remedial action projects.

Another feature of the design package is the preparation of a bid form that distinctly describes the overall scope of work in a manner that is logical from a bidding standpoint. The bid form should include both lump-sum and unit price aspects of the project, as appropriate and in all cases should be described in detail in a measurement and payment section of the specifications. The measurement and payment section should describe in detail the physical aspects of the remedial action program in exactly the same manner as presented on the bid form. The intent of a measurement and payment section of the specifications is to clarify which aspects of the design are to be included in each line item of the bid form. In addition, it is highly recommended that every bid form include a line item at the bottom for direct entry of a price by the bidder to encompass "all other work required by the contract documents not included in other bid items." The purpose of this specific line item is to compel the prospective bidders to review in detail the design and bid package and to reduce the possibility of subsequent claims during the remedial construction process. This requirement helps eliminate claims which originate as a result of inconsistencies between the requirements of the bid form and the technical requirements of the plans and specifications.

Another important feature for remedial design and bid packages is the explicit provision for variation in quantity clauses. Because of the uncertain nature of the quantities associated with many remediation projects, up-front mechanisms should be established in the contract during the procurement phase to handle large variations and quantities. A fair variation in quantities clause will reduce bidder's contingencies for the unit price bid items most likely to be affected by the large variation and estimated quantity. Examples of such line items are excavation and removal of contaminated soil on a volume or tonnage basis and treatment and discharge of contaminated water on a volumetric basis.

An additional feature of the design and bid package for hazardous waste remedial action projects should be the inclusion of a concise but very complete description of all chemical analysis data available to the design team regarding the site. This information is important to the prospective bidders, both from the standpoint of technical understanding of the site as well as the bidder's need to consider such data in the development of site-specific health and safety programs. Not including such information in a design package imposes severe risk with respect to liability on both the designer and the owner. In addition, it is highly appropriate to include all available geotechnical information such as boring logs, cross-sections, physical laboratory data, well installation diagrams and water levels as an appendix to the design package. This information is included to reduce contractor uncertainty and to mitigate future claims against the designer and/or the owner with respect to withholding site information that could have been important to the contractor in the performance of the remedial activities at the site. It is recommended that these data always be included.

A special requirement of Superfund projects is the clear delineation of the technical specifications of the explicit off-site disposal requirements for wastes considered hazardous that are being removed off-site for ultimate disposal. Standard contract language that has been utilized and approved by the various regulatory agencies is available that describes in legal terminology the U.S. EPA's position on off-site disposal policies for Superfund sites. Clear definition of this policy will help preclude future claims resulting from a vague definition of this policy in the design and bid package.

A final and probably most important point of discussion in the preparation of a design and bid package for remedial cleanup is the development and specification for remedial activities that will permit new, alternative and/or competitive technologies (sometimes proprietary technologies) to be utilized in the cleanup effort. The means by which alternate technologies can be considered in a competitive bid package are:

- Utilization of performance specifications in lieu of method specifications for on-site waste treatment or off-site waste treatment
- Permitting alternate disposal methodologies from those specified in the design cleanup package
- Specifying alternate remedial design features and requiring bids on each of those specified features

All three techniques have been successfully employed on public competitively bid remedial design projects under the Superfund Program. Examples with which the authors have had personal and specific experience are the preparation of bid packages for both synthetic and natural clay caps for waste disposal sites. These packages require the contractor to quote on one or both of the capping alternatives with the bid package including complete design information for each alternative to be quoted. Another example was providing the option for on-site treatment and recharge of excavation water or off-site transportation and disposal of that same water. The design package gave performance specifications to be met for the on-site treatment and recharge option and cited the standard off-site disposal requirements for off-site transportation and disposal. A third example was the use of performance specifications for a permanent on-site leachate treatment facility during the post-closure period at a Superfund site. The specifications provided quantities as well as ranges of contaminant concentrations for the influent leachate to be treated and cited both average and maximum discharge limits for the treated effluent. The contractor will be required to demonstrate acceptable performance with respect to the performance specifications during a trial operational period and is responsible for selecting and demonstrating the adequacy of the technologies that the contractor has chosen to employ to treat the specific waste stream.

These types of technical criteria delineations in the design and bid package enable increased competition and the introduction of alternate or proprietary technologies to the competitive bid process.

ESTABLISHING BIDDER QUALIFICATIONS

It is recognized both in the public and the private sector that the cleanup of Superfund sites should be accomplished by contractors who have the expertise, the experience and the resources to properly do the job. Under long-term remedial type construction projects, contracting organizations historically have developed several mechanisms to assure or at least maximize the likelihood that a qualified organization will be contracted to perform the cleanup. Many competitive procurements are initiated by developing a short list of qualified bidders based upon bidders establishing credentials of historical performance and demonstrating that performance by fulfilling pre-established criteria that are indicative of their ability to undertake the work. Oftentimes bidders must complete a prequalification document prior to being awarded a bid package that will enable them to compete for the project on a cost basis. In effect, this technique results in a two-phase competitive procurement. The first phase is a phase of competitive procurement independent of cost considerations for the specific contract being considered. The second phase includes only those bidders deemed to be sufficiently qualified to perform the work and puts those bidders into a price-type competitive bidding situation in which award will be based solely on the least cost to the owner, as perceived by the owner. The advantage of this two-step procurement process is that the second phase of procurement can be a "black and white" decision in which the contracting agency is simply able to award the project to the lowest bidder that has already demonstrated credible qualifications to undertake the project. This type of procurement practice is typical of that employed by many organizations to procure professional services, including design services.

A second type of pre-selection results from establishing significant bonding requirements for the performance of the remedial contract. Bonding organizations have become increasingly cognizant of the special nature of hazardous waste remedial construction and often are excellent at sorting out and eliminating unqualified contractors from the procurement process. Some recent government procurements for hazardous waste remedial construction projects have utilized significant bonding as the sole delineation of the qualified bidders.

Agencies in the private sector should utilize a combination of establishing and verifying technical and financial credentials of bidders prior to awarding construction contracts and should utilize prudent bonding practices to assure that those entities with which they contract are capable of fulfilling the goals of the remedial construction program. In all cases, it is recommended that a clear series of mechanisms be established to determine qualified versus nonqualified bidders. The final phase of the selection process preferably should be based on simple selection of the most financially advantageous bid submitted by those organizations already demonstrated to be qualified to execute the construction contract.

ADVERTISEMENT OF THE PROJECT

In this context, advertisement is defined as the actual letting of the bid package to those organizations who are potentially responsible bidders for the contract. The time period allocated to the bidders for review of the bid package and the preparation of their bids is of considerable significance. Allowing insufficient time to prepare hard-money quotations for performing a hazardous waste construction project will normally lead either to excessive contingency in the bidders' price quote or inadvertent omissions from the bidders' own construction cost estimate. These omissions may induce the bidders to either reduce cost with a possible reduction in the quality of the services provided or to submit additional claims to cover the omissions made in the original bid or cost estimate.

The allocation of too much time for the review and the submittal of a bid may result in over-refinement of the bid by the remedial contractor with a corresponding increase in the conservativeness of the price quoted. This second aspect is somewhat mitigated by the frequent practice in the real world of waiting until the last week that bids are due to prepare the cost estimate for the remedial construction project. However, a judicious selection of the time period allocated for review and submittal of bids is very appropriate. Good practice dictates that this period should range from 30 to 45 days, depending upon the complexity and the likelihood of extensive subcontracting of the given remedial construction program. If excessive feedback and numerous requests for clarification on the bid package are received by the contracting organization during the bid review process, the issuing of amendments to the bid package as well as the extension of the bid date are always appropriate. The allocation of insufficient time for this entire process only decreases the number of responsive bidders and increases the remedial construction costs ultimately paid by the contracting organization.

BID REVIEW AND AWARD

The review and award process will be greatly simplified if a systematic bid form has been utilized and if bids have only been received by contractors who were prequalified either by bonding or by preliminary technical prequalification. If bidders modified the bid form or submitted alternate proposals and methodologies not explicitly called for in the design documents, it is strongly recommended that these alterations be carefully and constructively reviewed and not simply be used as a means of eliminating an otherwise responsible and responsive bid. Normal contract language in construction procurement packages will give the reviewing agency the option to discount such non-standard bids. However, it is always in the contracting organizations' best interest to seriously review alternate and modified proposals. It is recognized that private entities have considerably more flexibility in this regard than government-sponsored procurements. The private agency should take advantage of this difference and view alternate proposals constructively.

Upon review of all proposals and the pricing submitted, the apparent qualified low qualified bidder should be denoted and notified. A meeting should be held with the apparent low bidder in order to discuss any misunderstandings that the bidder may have with respect to the technical, legal or financial requirements of the anticipated contract. It may be decided at this meeting that it would be in the best of interest of both parties if the apparent low bidder did not proceed with the project.

If a highly-qualified apparent low bidder has been identified, it is in the best interest of the contracting organization to solicit value engineering type proposals on the design as a means of determining if the bidder has an alternate scheme, methodology or technology that was not reflected in the original proposal. Actual execution of the remedial construction contract would normally take place if both parties mutually agree that they want to enter into the contract at the conclusion of this meeting.

CONCLUSION

The above sections of this paper cited experiences and recommendations of the authors for improved efficiency and satisfactory execution of the process of acquiring a remedial construction contractor for the cleanup of a Superfund site. These recommendations are an outgrowth of both normal good practice in the construction industry and some of the special and unique characteristics of the hazardous waste remedial cleanup industry. Means of continuing to improve the solicitation and performance of remedial construction contracts will continue to evolve. The authors gratefully acknowledge the clients, the regulatory agencies, the contractors and the colleagues who have added to our experience in the remedial cleanup process.

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WILLIAM D. RUCKELSHAUS

December 23, 1987

The Honorable
Frank R. Lautenberg
Committee on Environment and
  Public Works
U.S. Senate
Washington, D. C. 20510

Dear Senator Lautenberg:

On December 10, 1987, at a hearing of the Subcommittee on Superfund and Environmental Oversight, testimony was presented by the Natural Resources Defense Council (NRDC) about my involvement in an organization formed to study the implementation of the Superfund law. I would like to explain, for the record, exactly what this group, the Coalition on Superfund, is all about.

Quite simply, the Coalition intends to sponsor an intensive, long-term research program to track the implementation of the Superfund Amendments and Reauthorization Act of 1986 (SARA). We intend for the results of that research to be available for the debate on the reauthorization of Superfund due to take place in 1991. The goal of the Coalition is contained in a mission statement, which I enclose.

The research effort will be based on a detailed agenda which the Coalition has been formulating for the last several months. While the research agenda has not yet been finalized, I am attaching for the Subcommittee's information, a copy of the latest working draft The research will be conducted by a wide variety of institutions, including universities, public policy research organizations and private consulting firms. It is our hope to assemble a comprehensive, objective base of information on this law.

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We are now assessing whether this working research agenda can be translated into a concrete program that will yield a credible and comprehensive body of data. If we decide to move forward with this project, our plan calls for the Coalition to consult with a wide range of groups interested in Superfund to seek their advice and counsel on our efforts. Those groups include environmental organizations, state and local government associations and trade associations. We have already briefed staff of the key committees in the Senate and the House, as well as officials at EPA, while the Coalition has been in formation.

The Coalition consists of companies with an interest in Superfund; among the present membership are chemical, oil, automotive, insurance and consumer goods companies. While each of the companies has its own individual view of Superfund, the Coalition has not prejudged the law and has no pre-determined conclusions. All those involved agree, that the goal of providing sound data upon which policymakers can rely is paramount. Firm policy conclusions, if any, will not be developed by the Coalition until the reserach is completed. Any other approach would undermine the whole value of this effort.

It is my strong conviction that a comprehensive, analytical base of information on Superfund and how it works is absolutely essential to any useful consideration of this law. I believe that the research effort we are presently planning, conducted objectively and openly, cannot help but benefit the formation of public policy in the future.

Thank you for the opportunity to supply this information to the hearing record. I would be happy to brief the committee on this effort as it progresses.

Sincerely,

William D. Ruckelshaus

WDR:elp

cc: Senator Quentin N. Burdick
Senator Robert T. Stafford

Encl.

COALITION ON SUPERFUND

Mission Statement

Americans are united in their dedication to the national goal of resolving the country's hazardous waste disposal site problem efficiently, effectively and equitably. The Coalition's mission is to support a program that assures the achievement of this goal.

In anticipation of the reauthorization of the Superfund law in 1991, the Coalition will conduct and sponsor sound and rigorous research to understand the nature of the program established under the law and to document its implementation. It is our purpose to bring the results of this research into the public policy debate leading to the reauthorization of Superfund.

Throughout the duration of the project, the Coalition will consult with a wide range of policy-makers and other groups interested in Superfund. The results of the research will be made public in a timely manner.

SUPERFUND RESEARCH ISSUES

QUESTIONS TO BE RESEARCHED

A. Remedy Process: Does the current Superfund remedy selection process produce effective, efficient, and equitable remedies?

1. In order to assess the effectiveness of the remedy selection process, a study would be developed (1) on the level of risk associated with various remedy options and (2) on the cost and pace of various remedy options. These options would include:

   +Sites with no action.
   +Sites with removal action only.
   +Sites with containment remedies.
   +Sites with a mix of containment and permanent remedies.
   +Sites with permanent remedies.
   +Sites with permanent remedies using more restrictive environmental standards (e.g., MCLGs instead of MCLs, state standards that exceed federal standards).
   +Sites with remedies relating to natural resource damage.

2. In order to evaluate the cost effectiveness of remedy selection, a study into the use of technologies would be conducted (1)to determine if a pattern emerges regarding the use or limitation of use of cost effective technologies as a result of the remedy selection process and (2) to determine which factors enhance the use of cost effective technologies.

3. In order to assess the role of the Hazard Ranking System(HRS) in the cleanup process, a study to determine the role of the HRS relative to the selection of sites for remedy will be developed.

4. In order to assess the process of prioritizing sites for remedial action, a study into the factors which are used to determine which sites are selected would be developed to evaluate if a pattern of selection exists.

5. In order to assess the implications of natural resource damage remediation on the cost and pace of the Superfund program, a study to review the development of natural resource damage policy and its effects on remedial action cost and pace will be undertaken.

6. In order to determine whether alternative approaches to site cleanup are more efficient, effective and equitable, a study will be developed of the use of removal authority and of non-NPL or state site remedies including:

   +Non-NPL sites which receive fund monies for removal-only actions on an emergency basis and require no further remedial action and do not ever get on the NPL.
   +Voluntary remedies completed for sites under CERCLA Section 106 orders which never get on the NPL.
   +State superfund sites which are remedied under state orders, generally consistent with the National Contingency Plan(NCP) and are never included on the NPL.
   +Remedies conducted on Solid Waste Management Units under RCRA.
   +Remedies conducted under state statutes such as the New Jersey ECRA requirements.

7. In order to assess the effect of new SARA provisions relating to the role of states and citizens as they affect the cost, pace, and cleanup level of remedies, a study of these provisions will be developed.

8. In order to assess the implications of other environmental law on Superfund, a study of policy and regulations resulting from the Hazardous and Solid Waste Amendments of 1984 will be developed.

9. In order to assess the effect of different approaches to remedy development on the cost and pace of remedies, a study of these different approaches would be developed including:

   + PRP versus EPA development of RI/FS and remedy options.

B. Liability: Does the liability system of CERCLA and SARA result in efficient, effective, and equitable cleanups?

1. In order to assess the relative effect of liability systems, a study would be developed to evaluate the application of various legal theories to the types of situations present at Superfund sites.

   This study would include evaluation of various significant factors influencing these situations including the effects of limited causation demonstrations These factors would also include the effect of current liability for actions taken under previous regulatory and legal regimes

2. In order to assess the effect of CERCLA/SARA on business practices, a study of the changes in business practices would be developed to determine what are the relative effects on these practices from Superfund liability, regulation under the Resource Conservation and Recovery Act(RCRA), and the availability of insurance. This business practices addressed by this study would include product development, property acquisition, standard of care (i.e., whether the threat of Superfund liability has changed the manner in which a product or waste is handled), and other practices which may be identified.

3. In order to assess the effect of SARA on cleanup contractor cost, quality, and availability, a study would be developed to understand the role of SARA liability on contractors.

4. In order to assess whether SARA is encouraging additional litigation relating to private party costs, a study would be developed on the implications of private parties using CERCLA and SARA to try to recover costs from other private parties or the Federal government for private or National Priority List(NPL) remedies.

5. In order to assess whether corporate reactions to CERCLA/SARA enforcement actions are predictable, a study would be developed to review the corporate reactions to CERCLA/SARA and to other similar types of liability to determine whether a pattern emerges with an attendant rationale.

6. In order to assess the effect of the liability system on the ability of insurers to insure activities associated with hazardous materials, a study of the effect of CERCLA/SARA on the insurance mechanism would be developed

7. In order to assess the role of municipalities under the Superfund law, a study would be developed to examine (1) the impact of municipal waste disposal to NPL sites, (2) the contribution of municipalities to NPL site remedies, and (3) the impact on the general tax base of municipalities contributing to NPL site remedies

C. **Enforcement/Settlements: Is the current enforcement-based system the most efficient, effective, and equitable way of achieving remedies? Has the use of settlements enhanced the effectiveness, efficiency, and equity of remedies?**

1. In order to assess the implications of the Federal government's choice of legal options to induce site remediation, a study of the response of PRP's and government to the use of various legal options would be developed.

   + Fund lead sites with enforcement
   + Enforcement lead sites
   + Enforcement lead sites with administrative orders
   + Fund lead sites with settlements
   + Enforcement lead sites with settlements

2. In order to assess whether due process implications exist with regard to the use of Administrative Orders, a study would be developed.

3. In order to assess Federal government enforcement practices, a study of Federal enforcement efforts will be developed to determine if a relationship exists between the characteristics of sites, nature of PRPs, and the priority and method of enforcement.

4. In order to assess cost allocation under Superfund, a study of sites where costs have been allocated will be developed to determine if a pattern emerges relating to the share of the cost borne by the settling parties, if the allocation pattern reflects risks posed at the site by the parties or some other factors.

5. In order to determine whether settlements have improved the effectiveness, efficiency and equity of remedies, a study would be developed to review the use of settlement policy elements on the development of remedies with regard to factors such as transaction costs and cleanup standards including the following elements:

   +Mixed funding
   +Releases from liability
   +De Minimis contributor cash-outs
   +Non-binding allocations of responsibility

6. In order to assess whether remedies could be improved using settlements, a study would be developed to determine the interactions between settlement policy and enforcement and to identify where settlement policy options would have facilitated effective, efficient, and equitable remedies.

D. Transaction Costs: How do the combined features of CERCLA and SARA--liability, remedy selection, and enforcement procedures--affect the transaction costs? Are there any ways to reduce transaction costs?

1. In order to track the elements of transaction costs, a study to analyze details of transaction costs to provide a clear perspective of factors making up transaction costs including elements such as:

+Attorney fees, expert and consultant fees, court costs
+Pre-litigation procedures under CERCLA and SARA
+Cost of settlement negotiations, other than attorney fees
+Costs of cost recovery actions (i.e., government actions to recover funds used for removal or remedy actions)
+Costs related to defending other litigation related to waste sites (e.g., citizen suits against both the government and PRPs, suits related to bodily injury and property damage)
+Costs related to insurance coverage disputes
+General transaction costs (e.g., EPA and Dept. of Justice management costs)

2. In order to assess the nature and extent of transaction costs, a study (including the development of the information base) will be developed to determine whether a pattern emerges on the nature of transaction costs including:

+Magnitude of transaction costs versus cleanup costs
+Effects of settlement policy, enforcement, administrative orders on transaction costs
+Implications of transaction costs associated with issues of contribution (e.g., settlers suing non-settlers)
+Actions which reduce transaction costs

E. Economic and Public Policy Implications: What are the effects of the current Superfund program on the economy and competitiveness of domestic industries now and in the future?

1. In order to determine the minimum post-1991 funding needed to continue the current Superfund program, a study would be developed (1) to review program pace to assess Federal commitments beyond 1991 and (2) to assess the cost effective use of the fund.

2. In order to determine the potential national economic implications of a further expanded Superfund program, a study of various fund sizes and sources on the economy generally and on those elements of the economy most affected by possible alternatives would be developed

3. In order to assess the implications of cost recovery actions under Superfund on the economy, a study will be developed to analyze cost recovery efforts by the Federal government on business decisions to protect corporate structure and to deliver needed products and services including:

    +Separate analysis into different groupings such as small and large businesses
    +Assessment of sources of costs recovered for remedying actions legally taken at the time of occurrence and effects on these sources.

4. In order to assess the implications of Superfund on international competitiveness, a study will be developed on the economic implications of Superfund on the ability of domestic industries to compete internationally including the effects of foreign hazardous waste cleanup programs.

5. In order to assess the implications of creating a current liability on corporations and insurers for actions taken under previous regulatory and legal regimes, a study will be developed to determine (1) the potential impact of this liability on the ability of corporations and insurers to provide necessary products and services and to compete in international commerce and (2) the public policy implications involved in such a liability.

F. Third Party Damages: What are the implications of the current CERCLA and SARA laws on bodily injury and property damage issues?

1. In order to assess the implications of CERCLA/SARA on bodily injury and property damage issues, a study would be developed to (1) review bodily injury/property damage litigation at NPL sites and (2) analyze the Health Related Authorities section and other sections of SARA and the provisions of CERCLA relating to the Agency for Toxic Substances and Disease Registry(ATSDR) to determine longer range effects of these provisions on bodily injury and property damage litigation including:

    +Likelihood of more litigation
    +Development of state tort law
    +Understanding of levels of public health risk
    +Implications for future federal action

G. General

1. In order to determine whether a benchmark for comparison with Superfund Amendments and Reauthorization Act(SARA) can be defined, a review would be developed:

   (a) to assess the original goals of the Comprehensive Environmental Response, Compensation, and Liability Act(CERCLA) and whether the underlying public policy concerns have shifted since 1980.

   (b) to assess the implications of other domestic or foreign approaches to hazardous waste cleanup programs on the achievement of various public policy objectives.